

### ALCOHOL AND DRUG ABUSE DIVISION State of Hawaii Department of Health

### Ka Leo O Na Keiki

# The 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study

(1987-2000)

# Hawaii Adolescent Prevention and Treatment Needs Assessment

Executive Summary



## THE 2000 HAWAII STUDENT ALCOHOL, TOBACCO, AND DRUG USE STUDY (1987-2000):

### HAWAII ADOLESCENT PREVENTION AND TREATMENT NEEDS ASSESSMENT

### **Executive Summary**

by

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Data presented here are excerpted from the comprehensive volume *The 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study (1987-2000): Hawaii Adolescent Prevention and Treatment Needs Assessment* (Klingle, 2001). The comprehensive report is available throughout the Hawaii State Public Library System, at Hamilton and Sinclair Libraries, University of Hawaii at Manoa, and at each of the District School Offices. The study was supported by a grant from the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, Contract No. 277-98-6019.

#### 2000 HAWAII STUDENT ALCOHOL, TOBACCO, AND OTHER DRUG USE STUDY

#### **EXECUTIVE SUMMARY**

In the Spring of 2000, the State of Hawaii Department of Health, Alcohol and Drug Abuse Division, and the University of Hawaii Speech Department collaborated in a study designed to assess prevalence and trends in substance use, treatment needs, and risk and protective factors that predict substance use and abuse among Hawaii public and private school students statewide. The survey was administered anonymously to all 6th, 8th, 10th, and 12th grade students in attendance who received written parental consent to participate in the study. The results presented in this report are based on the responses of 25,860 students from 198 public schools and 39 private schools. Data from the previous Hawaii student alcohol, tobacco, and other drug use studies conducted by the Hawaii State Department of Education and the Northwest Regional Educational Laboratory in 1987, 1989, 1991, and 1993 (Woo, Yen, & Pollard, 1994) and by Drs. Klingle and Miller in 1996 and 1998 (Klingle & Miller, 1997; 1999) are used to assess trend results. Data from the National 2000 Monitoring the Future Study (Johnston, O'Malley, & Bachman, 2001) are used to make nationwide comparisons.

This executive summary presents an overview of the key findings from *The 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study (1987-2000): Hawaii Adolescent Prevention and Treatment Needs Assessment* (Klingle, 2001). Readers are encouraged to refer to the comprehensive volume for more specific details on the findings discussed in this report.

Section I highlights lifetime prevalence and trend data, and Section II focuses on monthly and daily prevalence and trend data. Prevalence refers to the percentage of the sample reporting use of a given substance on one or more occasions in the given period. Lifetime prevalence refers to use at least once in student's lifetime, monthly prevalence refers to use at least once in the past 30 days, and daily use refers to use on 20 or more occasions in the past 30 days. Twelve separate classes of drugs are distinguished for this report: Marijuana, cocaine, inhalants, methamphetamine, heroin or other opiates, tranquilizers or sedatives, ecstasy, hallucinogens, steroids, diuretics/laxatives, alcohol, and tobacco. Use of "any illicit drug" includes the use of marijuana, cocaine, inhalants, methamphetamine, heroin/opiates, tranquilizers or sedatives, ecstasy, hallucinogens, or steroids. Use of "any alcohol" refers to the use of wine, beer, or hard liquor. Use of "any tobacco" refers to the use of cigarettes or smokeless tobacco. Throughout this report, "substances" refers to alcohol, tobacco, and illicit drugs. Appendix A provides four prevalence tables. The first three tables provide lifetime, monthly, and daily prevalence trends from 1987 to 2000. Table 4 provides comparison data from the National 2000 Monitoring the Future Study.

Section III summarizes adolescent treatment needs in the State of Hawaii. Appendix B provides treatment needs tables. Table 5, summarizes statewide treatment needs in grades 6, 8, 10, and 12 for each substance classification (alcohol, marijuana, stimulants, depressants, and hallucinogens). Table 6 provides estimated statewide, county-level, district-level, and school-type (i.e., public versus private) treatment needs for students in grades 6 through 12 for alcohol and drug abuse.

Section IV summarizes adolescent prevention needs in the State of Hawaii. First, substance use onset, attitudes and beliefs about drugs, and the social environment are discussed. Next, the comprehensive risk and protective factor framework is explained, and key findings related to community profiles are highlighted. Appendix C provides a number of tables that focus on factors related to substance use, which should guide the development of substance abuse prevention programs.

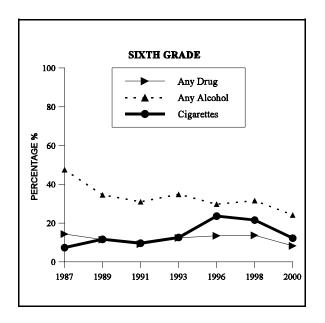
#### SECTION I – LIFETIME PREVALENCE AND TRENDS

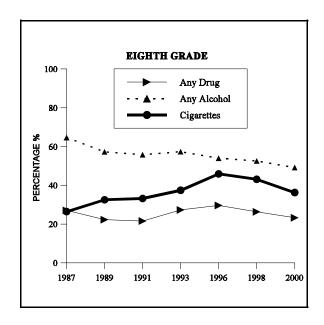
During the past decade, lifetime prevalence of any illicit drug use (e.g., use of any illicit drug at least once in a person's lifetime) steadily increased from 1991 to 1996 at all grade levels. This trend in any illicit drug use continued in 1998 for students in the upper grades, but a decrease in prevalence rates was noted for 8th graders, and a stabilization pattern was observed for 6th graders. In 2000, lifetime prevalence of any illicit drug use dropped at all grade levels. At the 12th grade level, lifetime prevalence reports decreased in 2000 for marijuana, inhalants, methamphetamine, and hallucinogens but remained unchanged for cocaine, heroin, sedatives, and steroids. At all other grade levels, lifetime prevalence reports generally declined across the board. The exceptions were for ecstasy reports, which increased in grades 10 and 12, and steroid reports, which remained level in grades 8, 10, and 12. Lifetime prevalence reports for alcohol and self-reported drunkenness are lower in 2000 than in 1998; they are also down from a decade earlier, when they were at an all-time low. One of the most substantial drops occurred at the 6th-grade level, where 48% of the 6th graders reported trying alcohol in 1987, compared to only 24% in 2000. Cigarette use rose sharply from 1993 to 1996, but began to drop in 1998 and continued to drop substantially in 2000. Hawaii lifetime prevalence reports for alcohol, tobacco, and illicit drugs are generally much lower than nationwide reports. Hawaii trends in illicit drugs, alcohol, and tobacco often reflect nationwide trends. Nationwide, ecstasy use is on the rise, cigarette use continues to decline, and alcohol use remains stable.

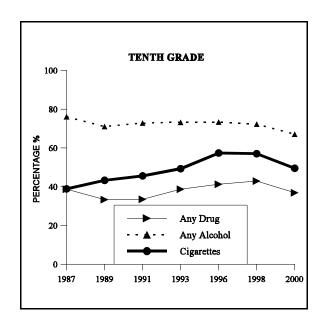
Refer to Table 1 for lifetime prevalence data and Table 4 for nationwide comparison data (Appendix A). Figure 1 illustrates trends in lifetime illicit drug, alcohol, and tobacco use since 1987. Figures 2 and 3 display the nationwide comparison data for lifetime illicit drug, alcohol, and tobacco use.

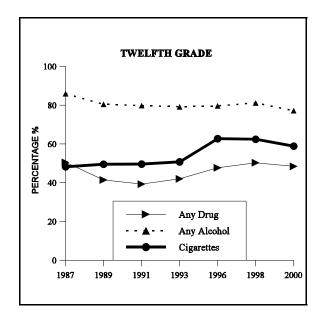
- Lifetime use of *any illicit drug* decreased from 1987 to 1991, steadily increased in 1993 and 1996, and continued to increase in 1998 in the upper grades. In 2000, lifetime use of any illicit drug dropped substantially at all grade levels. In 2000, lifetime prevalence reports of any illicit drug use, including inhalants, were 8% for 6th graders, 23% for 8th graders, 37% for 10th graders, and 48% for 12th graders, down from 14%, 26%, 43%, and 50% reported by students in the same grades in 1998.
- Hawaii lifetime prevalence reports for *any illicit drug* are at least nine percentage points *lower than nationwide reports* for 8th (23% vs. 35%), 10th (37% vs. 49%), and 12th graders (48% vs. 57%).
- Substance use across the board has generally declined in Hawaii, with the most notable decreases occurring among students in the lower grade levels. *Ecstasy* use in 2000, however, is up from previous years in grades 10 and 12. In 1998, 4% of 10th graders and 5% of 12th graders reported using ecstasy. In 2000, 5% of 10th graders and 8% of 12th graders reported using ecstasy. Nationwide, ecstasy use increased drastically in 1999 among 12th graders and climbed for all grade levels in 2000. Hawaii lifetime prevalence reports in 2000 for ecstasy use in grades 8, 10, and 12 (2%, 5%, 8%) are lower than 2000 nationwide reports for ecstasy use in the same grades (4%, 7%, 11%) but are nearly equal to 1999 nationwide reports (3%, 6%, 8%). Johnston, O'Malley, and Bachman (2000) reported that ecstasy use was largely concentrated in the northeast in 1999 and diffused to the west in 2000. Hawaii may be a year behind the west coast, with sharper increases in the next few years if prevention efforts are not directed toward curtailing ecstasy use.

FIGURE 1
Trends in Lifetime Prevalence of Any Illicit Drug, Any Alcohol, and Cigarette Use for Sixth, Eighth, Tenth, and Twelfth Graders, 1987-2000









<u>FINDINGS</u>: Lifetime prevalence of any illicit drug use (e.g., use of a substance at least once in a person's lifetime) steadily increased from 1991 to 1996 at all grade levels. This trend in any illicit drug use continued in 1998 for students in the upper grades, but a decrease in prevalence rates was noted for 8th graders, and a stabilization pattern was observed for 6th graders. In 2000, lifetime prevalence of any illicit drug use dropped at all grade levels. Lifetime prevalence reports for alcohol are lower in 2000 than in 1998; they are also down from a decade earlier when they were at an all-time low. Cigarette use rose sharply from 1993 to 1996, but began to drop in 1998 and continued to drop substantially in 2000.

- The trends for any illicit drug use are largely a function of marijuana, the most widely used of the illicit drugs. Lifetime prevalence reports of *marijuana* steadily increased from 1991 to 1998 for 10th and 12th graders, dropped in 1998 for 8th graders, and remained stable for 6th graders. Lifetime prevalence reports for marijuana use in 2000 declined across all grade levels, with reports nearly equal to 1993, when marijuana use was just beginning to climb.
- Nearly half of the seniors have tried *marijuana*. In 2000, 2% of the 6th graders, 16% of the 8th graders, 33% of the 10th graders, and 46% of the 12th graders reported trying marijuana at some point in their lifetimes. These rates are lower than nationwide reports, where 20% of the 8th graders, 40% of the 10th graders, and 49% of the 12th graders reported having tried marijuana.
- Inhalants are the second most popular illicit drug type, with 5% of 6th graders, 10% of 8th graders, 7% of 10th graders, and 6% of 12th graders reporting they have used inhalants at least once. Prevalence rates for inhalant use in 2000 are down from 1998 prevalence rates and are substantially lower than nationwide rates. Nationwide, 18% of 8th graders, 17% of 10th graders, and 14% of 12th graders have used inhalants at least once.
- Lifetime prevalence reports for use of *hallucinogens* are down by approximately two percentage points from 1998 to 2000. In 1998, 2% of 6th graders, 5% of 8th graders, 9% of 10th graders, and 12% of 12th graders reported trying hallucinogens. In 2000, 0% of 6th graders, 3% of 8th graders, 6% of 10th graders, and 10% of 12th graders reported trying hallucinogens. These rates are lower than those reported nationwide, where 5% of 8th graders, 9% of 10th graders, and 13% of 12th graders reported having tried hallucinogens.
- Lifetime prevalence reports for *methamphetamine* use were at their highest point in 1989, dropped in 1991 and remained relatively unchanged until 1996, where they began to drop in grades 10 and 12. In 2000, lifetime prevalence reports for methamphetamine use are down by one to two percentage points in all grades. Nationwide, reports of methamphetamine use have declined only modestly and, in 2000, are higher than Hawaii prevalence reports. In Hawaii, 1% for 6th graders, 2% for 8th graders, 5% for 10th graders, and 6% for 12th graders reported having tried methamphetamine. Nationwide, 4% of 8th graders, 7% of 10th graders, and 8% of 12th graders reported having tried methamphetamine.
- In 2000, lifetime prevalence reports for use of *cocaine*, *sedative/tranquilizers*, and *heroin* decreased by at least one percentage point in grades 6, 8, and 10 but remained relatively stable in grade 12. Also unchanged since 1998 are lifetime prevalence reports for use of *steroids* in grades 8, 10, and 12. Each of these illicit drugs are used by no more than 1% of 6th graders, 2% of 8th graders, 4% of 10th graders, and 6% of 12th graders, and the rates in Hawaii are lower than those reported nationwide.

#### FIGURE 2

#### Lifetime Prevalence of Illicit Drug Use (Nationwide versus Hawaii), by Grade, 2000

(Entries are percentages %)

Figure 2a: Lifetime Illicit Drug Use (Any)

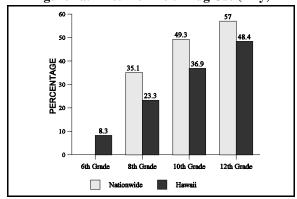


Figure 2b: Lifetime Ecstasy/MDMA Use

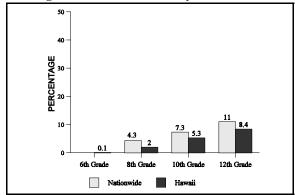


Figure 2c: Lifetime Marijuana Use

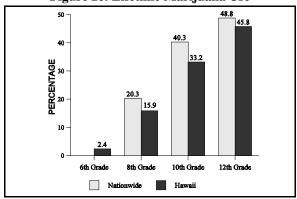


Figure 2d: Lifetime Inhalant Use

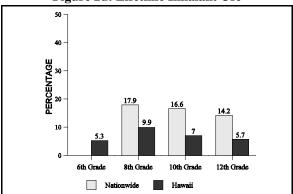


Figure 2e: Lifetime Hallucinogen Use

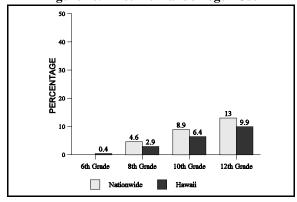
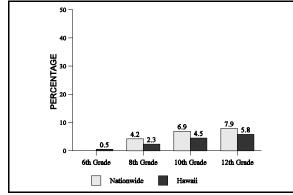


Figure 2f: Lifetime Methamphetamine Use



<u>FINDINGS</u>: Marijuana is the most prevalent illicit drug for 8th, 10th, and 12th graders, with nearly half of the seniors reporting that they have tried marijuana. Inhalants are the most prevalent illicit drug type for 6th graders and the second most prevalent illicit drug type for 8th and 10th graders. Hallucinogens, closely followed by ecstasy, are the second most prevalent drug type among 12th graders. Lifetime prevalence reports for illicit drug use in Hawaii are lower than nationwide reports.

- Although lifetime use of *any alcohol* (e.g., beer, wine, or hard liquor) had remained relatively unchanged over the years, a substantial decrease occurred in 2000. In 2000, lifetime prevalence reports of any alcohol use were 24% for 6th graders, 49% for 8th graders, 67% for 10th graders, and 77% for 12th graders, down from 32%, 53%, 72%, and 81% reported by students in the same grades in 1998. Lifetime prevalence reports for any alcohol use in Hawaii are several percentage points lower than nationwide reports where 52% of the 8th graders, 71% of the 10th graders, and 80% of the 12th graders reported having tried alcohol.
- In 2000, reports of *drunkenness* decreased by more than two percentage points across all grade levels. Half as many 6th graders in 2000, compared to 1998, reported getting drunk at least once in their lifetimes (3% vs. 6%). Nationwide, reports of having been drunk remained unchanged in 2000 and are higher than Hawaii reports for 8th (25% vs. 17%), 10th (49% vs. 38%), and 12th graders (62% vs. 53%).
- In 2000, very few 6th (3%) and 8th graders (12%) reported that they *drank alcohol on a regular basis* (i.e., drank alcohol at least once or twice a month). Over a fourth of 10th (26%) and 12th graders (40%), however, reported that they drank alcohol on a regular basis.
- Lifetime *cigarette* prevalence reports were climbing since 1987, with the largest increase occurring in 1996. However, as seen in Figure 1, beginning in 1998 and continuing in 2000, cigarette use finally began an encouraging decline. This coincides with a nationwide downward trend in cigarette prevalence reports. Hawaii lifetime cigarette prevalence reports in grades 8 (36%), 10 (50%), and 12 (59%) are lower than nationwide cigarette prevalence reports in the same grades (41%, 55%, 63%). Nearly half as many Hawaii 6th graders in 2000 (12%), as compared to 1998 (22%), reported that they had tried cigarettes.
- Use of *smokeless tobacco* is less prevalent than use of cigarettes and is much lower in Hawaii than nationwide reports for 8th (4% vs. 13%), 10th (5% vs. 19%), and 12th graders (10% vs. 23%). The use of smokeless tobacco decreased by almost 50% from 1998 to 2000 in several grades. In 1998, 3% of 6th graders, 6% of 8th graders, 10% of 10th graders, and 16% of 12th graders reported trying smokeless tobacco. In 2000, 1% of 6th graders, 4% of 8th graders, 5% of 10th graders, and 10% of 12th graders reported trying smokeless tobacco.
- In 2000, the percentages of students reporting that they have *regularly smoked cigarettes* at some point in their lifetimes decreased by at least four percentage points in all grades. In 1998, 6% of 6th graders, 19% of 8th graders, 28% of 10th graders, and 31% of 12th graders reported that they had regularly smoked cigarettes at some point in their lifetimes. In comparison, only 2% of 6th graders, 12% of 8th graders, 19% of 10th graders, and 26% of 12th graders reported in 2000 that they had regularly smoked cigarettes at some point in their lifetimes.

#### FIGURE 3

#### Lifetime Prevalence of Alcohol and Tobacco Use (Nationwide versus Hawaii), by Grade, 2000

(Entries are percentages %)

Figure 3a: Lifetime Alcohol Use

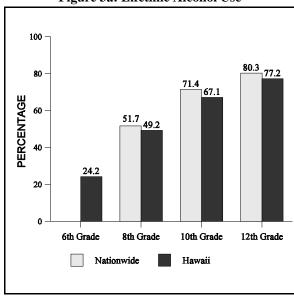


Figure 3b: Been Drunk in Lifetime

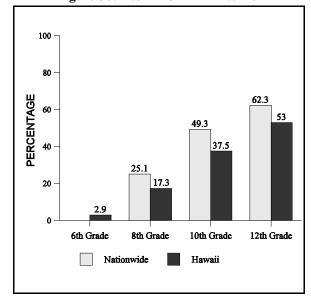


Figure 3c: Lifetime Cigarette Use

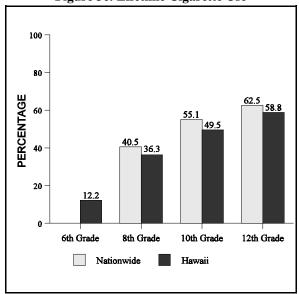
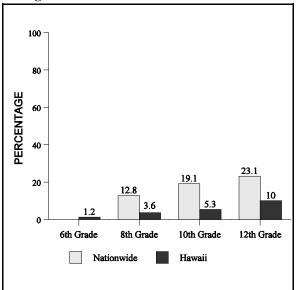


Figure 3d: Lifetime Smokeless Tobacco Use



<u>FINDINGS</u>: The majority of 12th graders reported that they had tried alcohol, tried cigarettes, and been drunk, whereas less than half of the 6th and 8th graders reported that they had tried alcohol, tried cigarettes, and been drunk. For 10th graders, the majority reported that they had tried alcohol, approximately half of them reported that they had tried cigarettes, and over a third reported that they had been drunk. Hawaii lifetime prevalence reports for alcohol, self-reported drunkenness, cigarettes, and smokeless tobacco are lower than nationwide reports.

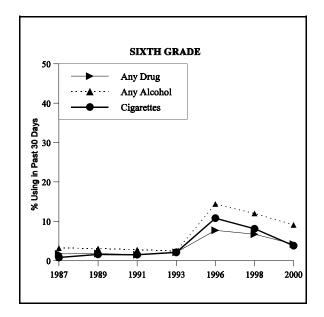
#### SECTION II – MONTHLY AND DAILY PREVALENCE AND TRENDS

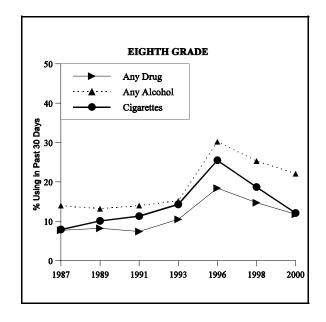
From 1993 to 1996, a substantial increase in monthly prevalence reports occurred for all substances, in all grades. This rise halted in 1998 at all four grade levels and continued to drop or to stabilize in 2000 for all substances except ecstasy, which rose in the 10th and 12th grade. Most decreases in 2000 brought monthly prevalence reports down to 1993 levels, and some have even reached 1987 levels, the year the study first began. Monthly prevalence reports for alcohol and tobacco use have dropped substantially in 2000. Monthly alcohol prevalence reports in 2000, however, are still higher than those reported in the early 90's. Monthly cigarette prevalence reports, on the other hand, are now close to or lower than those reported in the early 90's. Nationwide, monthly prevalence reports for all substances have remained fairly stable, with only a few exceptions: Hallucinogen use has declined among 10th and 12th graders, ecstasy use has increased for all grades, and cigarette use has declined for all grades. Most substances are not used on a daily basis by Hawaii students except for marijuana, alcohol, and tobacco, with daily prevalence rates down since 1996 for all grade levels. Daily cigarette prevalence rates are substantially lower in 2000 than in previous years, for all grade levels. Nationwide, daily marijuana use has remained unchanged since 1996, daily alcohol use has gone down slightly since 1996 for 8th and 12th graders, and daily cigarette and smokeless tobacco use have decreased for 10th and 12th graders.

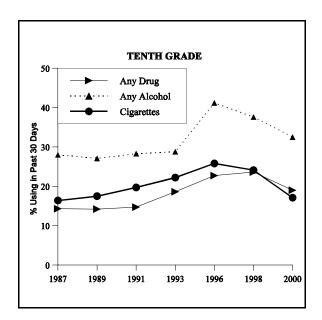
Refer to Table 2 for monthly prevalence data, Table 3 for daily prevalence data, and Table 4 for nationwide comparison data (Appendix A). Figure 5 illustrates trends in monthly substance use since 1987, and Figure 6 displays the nationwide comparison data for monthly substance use.

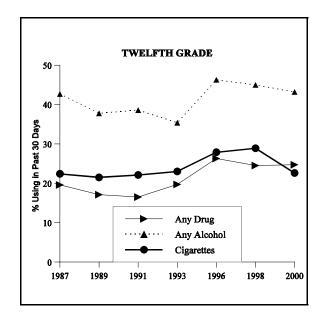
- Monthly use of *any illicit drug* increased drastically for all grade levels in 1996 and then decreased in 1998 at all grade levels except the 10th grade. In 2000, the downward trend continued at all grade levels except at the 12th grade, where monthly reports stabilized. Nationwide, monthly prevalence reports of any illicit drug use stabilized across all grades and are higher than monthly prevalence reports in Hawaii. In Hawaii, 4% of 6th graders, 12% of 8th graders, 19% of 10th graders, and 25% of 12th graders have used an illicit drug in the past 30 days; nationwide, 14% of 8th graders, 24% of 10th graders, and 26% of 12th graders have used an illicit drug in the past 30 days.
- Table 2 shows a decrease or stabilization pattern in monthly illicit drug use for all illicit drugs except *ecstasy*, with many decreases approaching 1987 levels. The percentages of 10th and 12th graders who reported using ecstasy on a monthly basis nearly doubled from 1998 to 2000, reaching proportions that are approximately equal to nationwide reports. In 1998, 2% of 10th and 12th graders used ecstasy in the past 30 days, compared to 3% and 4% in 2000. Monthly prevalence reports for ecstasy use decreased slightly for 6th and 8th graders. Nationwide, monthly reports for ecstasy use increased across all grade levels, with increases occurring for the first time among 8th graders.
- Monthly *marijuana* use has shown an encouraging downward pattern since 1996. In 2000, compared to 1998, monthly marijuana prevalence rates dropped for 6th (3% to 1%), 8th (12% to 9%), and 10th graders (22% to 17%), and stabilized for 12th graders (23% in 1998 and 2000). Monthly prevalence reports for marijuana in 2000, however, are still higher than those reported in the late 80's and early 90's. Monthly prevalence reports for *marijuana* use in Hawaii are lower than nationwide reports for 10th graders (17% vs. 20%), are equal to nationwide reports for 8th (9% each), and are slightly higher than nationwide reports for 12th graders (23% vs. 22%).

FIGURE 4
Trends in Monthly (30-Day) Prevalence of Any Illicit Drug, Any Alcohol, and Cigarette Use for Sixth, Eighth, Tenth, and Twelfth Graders, 1987-2000









<u>FINDINGS</u>: From 1993 to 1996, a substantial increase in monthly prevalence reports for any illicit drugs occurred in all grades. This rise in any illicit drug use halted in 1998 at all four grade levels and continued to drop or stabilized in 2000. The decreases in any illicit drug use in 2000 brought monthly prevalence reports down to 1993 levels, and, in some cases, near 1987 levels. Monthly prevalence reports for alcohol and tobacco use have dropped substantially in 2000. Monthly alcohol prevalence reports in 2000, however, are still higher than those reported in the early 90's. Monthly cigarette prevalence reports, on the other hand, are now close to or lower than those reported in the early 90's.

#### FIGURE 5

### Monthly (30-Day) Prevalence of Various Substances (Nationwide versus Hawaii), by Grade, 2000

(Entries are percentages %)

Figure 5a: 30-Day Any Drug Use

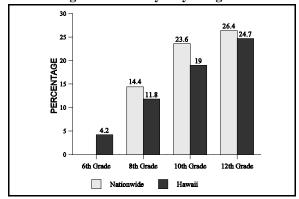


Figure 5b: 30-Day Ecstasy/MDMA Use

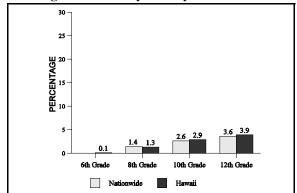


Figure 5c: 30-Day Marijuana Use

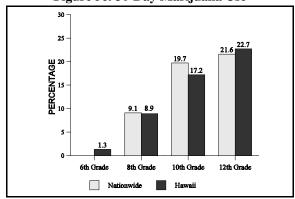


Figure 5d: 30-Day Alcohol Use

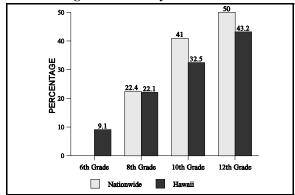


Figure 5e: 30-Day Cigarette Use

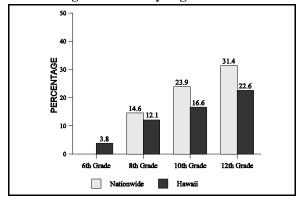
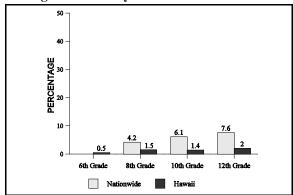


Figure 5f: 30-Day Smokeless Tobacco Use



<u>FINDINGS</u>: Monthly prevalence reports for any illicit drugs, alcohol, and tobacco are lower than nationwide reports. Monthly prevalence reports for marijuana use in Hawaii are lower than nationwide reports for 10th graders, and equal to nationwide reports for 8th and 12th graders. Monthly prevalence reports for ecstasy use in Hawaii are similar to nationwide reports.

- Unlike lifetime alcohol prevalence reports, which have remained relatively stable over the years, monthly *alcohol* prevalence reports have changed drastically over time. Monthly alcohol prevalence reports peaked in the mid-90's, started to drop in 1998, and continued to drop in 2000. Nearly 1 out of 10 Hawaii 6th graders (9%) reported using alcohol in the past 30 days. Hawaii monthly alcohol prevalence reports are much lower than nationwide reports for 10th (33% vs. 41%) and 12th graders (43% vs. 50%) and equal to nationwide reports for 8th graders (22% each).
- One of the most encouraging downward trends in monthly prevalence is for tobacco use. *Cigarette* use was on the rise from 1987 to 1996, but has since been consistently and dramatically dropping. Monthly cigarette prevalence reports in 2000 for grades 6, 8, 10, and 12 were 4%, 12%, 17%, and 23%, which are substantially lower than 1998 reports of 8%, 19%, 24%, and 29% and close to prevalence rates in 1987, when monthly cigarette use was at an all-time low (1%, 8%, 16%, and 22% in the same grades). Nationwide, monthly cigarette prevalence reports have also been on the decline, but remain higher than those reported in Hawaii.
- Monthly *smokeless tobacco* use rates decreased by more than five percentage points in Hawaii and are much lower than nationwide rates. In Hawaii, monthly prevalence reports for smokeless tobacco are 1% for 6th and 10th graders and 2% for 8th and 12th graders. Nationwide, prevalence reports for smokeless tobacco are 4% for 8th graders, 6% for 10th graders, and 8% for 12th graders.
- With the exception of marijuana, alcohol, and cigarettes, *daily substance use* is less than 1% in all grades. Daily use of each substance has decreased or stabilized, with the largest decreases noted for cigarette and alcohol use.
- Daily use is most frequent for cigarettes, followed by marijuana and alcohol. *Cigarettes* are used daily by less than 1% of 6th graders, and by 2% of 8th graders, 6% of 10th graders, and 12% of 12th graders. Nationwide prevalence reports for daily cigarette use are nearly twice as high (7% of 8th graders, 14% of 10th graders, and 21% of 12th graders). Nationwide prevalence reports for smoking ½ a pack of cigarettes a day are also much higher than Hawaii reports. In Hawaii, 2% of 8th graders, 3% of 10th graders, and 6% of 12th graders reported smoking ½ a pack of cigarettes a day. Nationwide, 3% of 8th graders, 6% of 10th graders, and 11% of 12th graders reported smoking ½ a pack of cigarettes a day.
- *Marijuana* is reported to be used on a daily basis by 0% of the 6th graders, 2% of 8th graders, 3% of 10th graders, and 5% of 12th graders. Daily use of marijuana in Hawaii is similar to daily marijuana use nationwide for 8th (1.5% compared to 1.3% nationwide) and 10th graders (3.4% compared to 3.8% nationwide) and is slightly lower than nationwide reports for 12th graders (4.6% compared to 6.0% nationwide).
- Reports of daily *alcohol* use are nearly equal to daily marijuana use and are slightly higher than nationwide reports. Daily use of alcohol in Hawaii is 1% for 6th graders, 2% for 8th and 10th graders, and 4% for 12th graders; daily use of alcohol nationwide is 1% for 8th graders, 2% for 10th graders, and 3% for 12th graders.

# FIGURE 6 Daily Prevalence of Marijuana, Alcohol, and Tobacco Use (Nationwide versus Hawaii), by Grade, 2000

(Entries are percentages %)

Figure 6a: Daily Marijuana Use

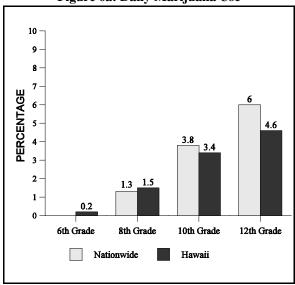


Figure 6b: Daily Alcohol Use

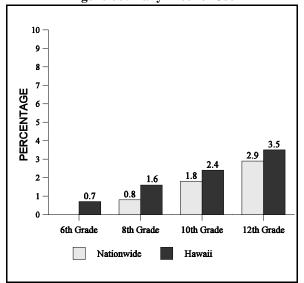


Figure 6c: Daily Cigarette Use

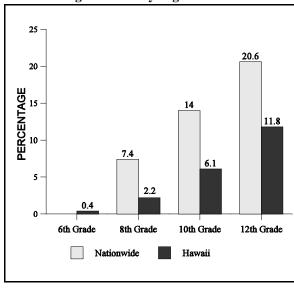
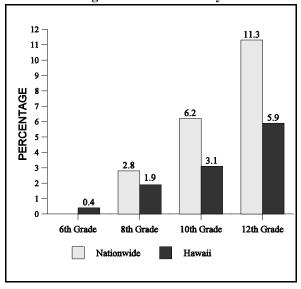


Figure 6d: 1/2 Pack +/Day



<u>FINDINGS</u>: Daily substance use is highest for cigarettes, followed by marijuana and then alcohol. Daily use of marijuana in Hawaii is similar to daily marijuana use nationwide for 8th and 10th graders and is slightly lower than nationwide reports for 12th graders. Reports of daily alcohol use in Hawaii are nearly equal to reports of daily marijuana use and are slightly higher than nationwide reports. Daily cigarette prevalence reports are twice as high nationwide as compared to Hawaii.

#### SECTION III – TREATMENT NEEDS

Survey efforts in 1996, 1998, and 2000 assessed adolescent treatment needs in the State of Hawaii using the DSM-III-R criteria for substance abuse, which emphasize negative social and interpersonal consequences resulting from using drugs. The present study used DSM-III-R criteria to determine adolescent treatment needs in the State of Hawaii for alcohol, marijuana, stimulants (cocaine, speed, or methamphetamine), depressants (downers, sedatives, or heroin), and hallucinogens. Two types of diagnoses are distinguished by the DSM-III-R criteria: dependence and abuse. Dependence is the most severe diagnosis and includes physiological symptoms, such as tolerance and withdrawal, and behavioral symptoms, such as impaired control over the use of a substance. Abuse is a residual category for those who do not meet the criteria of dependence but who use substances in dangerous situations or who use substances despite having problems related to their substance use. Because of the high likelihood that substance abuse by adolescents will turn into a dependency problem, students are considered needing treatment, or at least screening for treatment, if they meet either a dependence or abuse diagnosis for any of the five drug classifications.

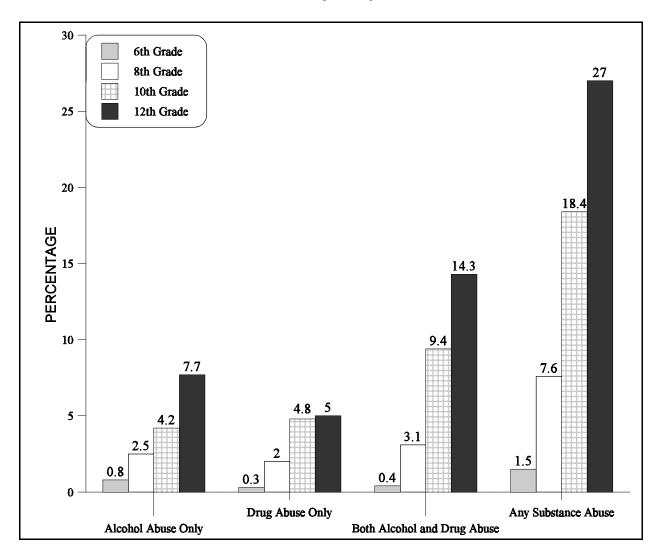
Substance abuse treatment is needed for 2% of 6th graders, 8% of 8th graders, 18% of 10th graders, and 27% of 12th graders statewide. Many students who abuse alcohol also abuse illicit drugs, and the most common illicit drug abused is marijuana. More than 12,000 public school students in grades 6 through 12 (approximately 14%) are estimated to need treatment for alcohol and/or drug abuse. Statewide treatment needs for the combined public and private school population in grades 6 through 12 are estimated to be 14,175 (13%), which is less than estimated statewide treatment needs in 1998 (16%) but still higher than those reported in 1996 (10%). Estimated treatment needs are highest in Hawaii County (20%) and lowest in the City & County of Honolulu (12%). At the district level, Windward District exceeds other districts on Oahu in regards to the proportion of students needing treatment and generally has a larger proportion of 8th and 10th graders needing treatment for various substances than all other districts statewide. Kauai and Hawaii Districts have an equally high proportion of seniors needing treatment, with the proportions greatly exceeding all other districts. Although the state has effective residential, outpatient, and school-based treatment programs for adolescents, less than 15% of the students diagnosed with a substance abuse problem from the current study have utilized a treatment facility. Students are much more likely to receive help for a substance abuse problem if they perceive they need help and if they have been told by others to get help.

Refer to Table 5 for statewide treatment needs in grades 6, 8, 10, and 12 for each substance classification, and Table 6 for estimated statewide, county-level, district-level, and school-type (i.e., public versus private) treatment needs for students in grades 6 through 12 (Appendix B). Figures 7 and 8 illustrate statewide treatment needs for various substances, Figure 9 displays statewide treatment needs trends, and Figure 10 displays treatment needs in different districts.

• Using the DSM-III-R criteria, estimated statewide treatment needs among public school students in grades 6 through 12 are as follows: 3,214 students for alcohol abuse only, 2,860 students for drug abuse only, 6,106 students for both alcohol and drug abuse, and 12,145 students for any substance abuse treatment. Adding private school students to statewide treatment needs brings the total number of students needing treatment for any substance abuse to 14,175 (13% of the students in grades 6 through 12 statewide).

- As seen in Figure 7, approximately half of the students who need treatment need help for both alcohol and drug abuse rather than for either of these alone. As noted in Table 6, 7% of the students statewide in grades 6 through 12 need treatment for both alcohol and drug abuse, whereas 4% of the students statewide need treatment only for alcohol abuse and 3% need treatment only for drug abuse. *Any* alcohol and *any* drug abuse treatment need estimates for students in grades 6 through 12 statewide are 10% each.
- The high percentage of students needing treatment for any drug abuse is largely a function of marijuana abuse. The percentage of students needing treatment for marijuana abuse in grades 6 (1%), 8 (4%), 10 (12%), and 12 (17%) are very similar to the percentage needing treatment for any alcohol abuse (1%, 5%, 13%, 20%). Treatment needs for other illicit drugs are relatively low.
- Treatment needs increased drastically from 1996 to 1998 but dropped in 2000. Total estimated treatment need percentages for students in grades 6 through 12 statewide were 10% in 1996, 16% in 1998, and 13% in 2000.
- Over the years, treatment needs have fluctuated the least in the lower grade levels. In 1996 and 1998, 3% of 6th graders needed treatment; in 2000, 2% needed treatment. In 1996 and 1998 approximately one tenth of the 8th graders were estimated to need treatment; in 2000, 8% are estimated to need treatment. In the upper grades, treatment needs nearly doubled from 1996 to 1998 with 13% of 10th graders and 15% of 12th graders needing treatment in 1996, compared to 22% of 10th graders and 29% of 12th graders needing treatment in 1998. In 2000, treatment needs dropped among 10th (18%) and 12th graders (27%), but remained higher than 1996 levels.
- Broken out by county, Hawaii County has the largest proportion of students in grades 6 though 12 estimated to need treatment (20%), followed by Maui County (17%), Kauai County (16%), and the City & County of Honolulu (12%). The City & County of Honolulu, however, has the largest *number* of students in grades 6 through 12 estimated to need treatment (*n*=6,701), followed by Hawaii County (*n*=2,808), Maui County (*n*=1,804), and Kauai County (*n*=832).
- Broken out by district, Hawaii District has the largest proportion of students in grades 6 through 12 estimated to need treatment (20%), followed by Windward (18%), Maui (17%), Kauai (16%), Leeward and Central (11% each), and Honolulu (10%) Districts. Compared to other districts, Hawaii District also has a larger *number* of students in grades 6 though 12 estimated to need treatment. Hawaii District has almost twice the proportion of 6th and 8th graders who need substance abuse treatment. Windward District has a larger proportion of 10th graders who need substance abuse treatment than other districts. For 12th graders, substance abuse is equally high in Hawaii and Kauai Districts.
- Less than 15% of the students diagnosed with a substance abuse problem from the current study have utilized treatment facilities. Students are much more likely to receive help for a substance abuse problem if they perceive they need help and if they are told by others to get help. Unfortunately, the percentage of students who perceive that they have a problem or who have been told to get help is less than 5%.

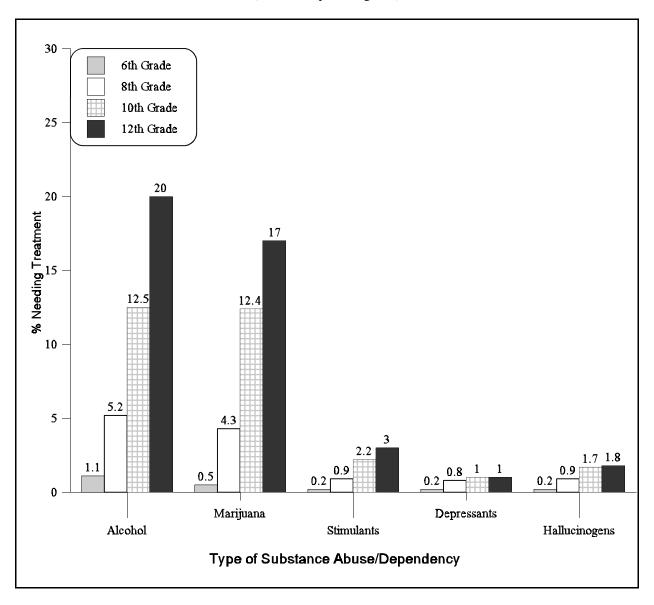
FIGURE 7
2000 Hawaii Statewide Treatment Needs for Alcohol and Illicit Drug Dependency/Abuse
Using the DSM-III-R Criteria, by Grade



<u>FINDINGS</u>: Approximately half of the students who need treatment need help for *both* alcohol and drug abuse rather than for either of these alone. Nearly a tenth of 8th graders need treatment for substance abuse; and approximately one of five 10th and 12th graders needs treatment for substance abuse.

Notes: "Alcohol Abuse Only" includes students classified as dependent on or abusers of alcohol according to the DSM-III-R criteria, but who are not dependent on or abusers of illicit drugs. "Drug Abuse Only" includes students classified as dependent on or abusers of at least one illicit drug according to the DSM-III-R criteria, but who are not dependent on or abusers of alcohol. Illicit drug dependency/abuse is assessed for marijuana, stimulants, depressants, and hallucinogens. "Both Alcohol and Drug Abuse" includes students classified as dependent on or abusers of both alcohol and illicit drugs. "Any Substance Abuse" includes students who are classified as dependent on or abusers of alcohol, illicit drugs, or both according to the DSM-III-R criteria.

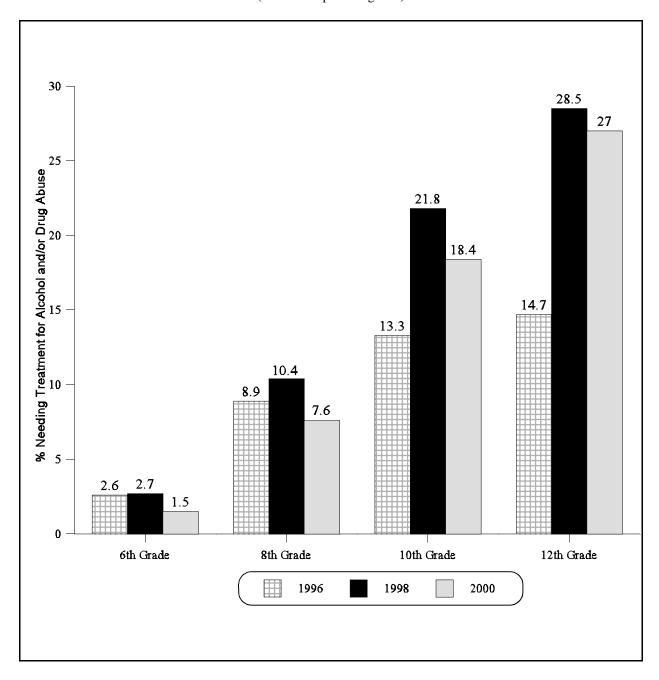
FIGURE 8
2000 Hawaii Statewide Treatment Needs for Alcohol and Other Drugs of Concern,
Using the DSM-III-R Criteria, by Grade



<u>FINDINGS</u>: Marijuana is the most commonly abused illicit drug, with the percentages of students needing treatment for marijuana abuse very similar to the percentages of students needing treatment for alcohol abuse.

<u>Notes</u>: "Abuse" refers to abuse of or dependency on a substance. Stimulants include cocaine, methamphetamine, or speed. Depressants include downers, sedatives, or heroin. The categories above are not mutually exclusive because students who abuse one substance may also abuse another substance (e.g., a student may need treatment for both alcohol and marijuana). Thus, total treatment needs cannot be determined by adding across substances. Refer to Appendix B, Table 3, for total treatment needs.

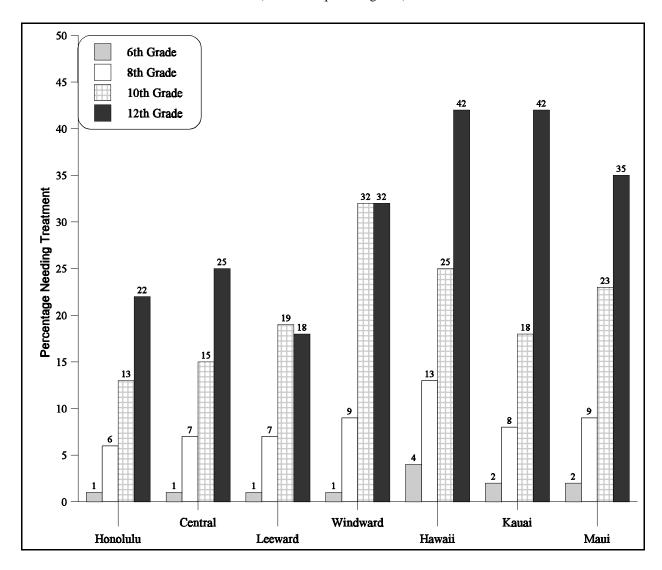
FIGURE 9
Trends in Hawaii Statewide Treatment Needs, by Grade (1996-2000)



<u>FINDINGS</u>: Treatment needs across all grade levels increased from 1996 to 1998, but dropped in 2000. Treatment needs dropped since 1998 for 6th and 8th graders, and are lower than in 1996. Treatment needs also dropped since 1998 for 10th and 12th graders, but are still higher than in 1996.

# FIGURE 10 District Treatment Needs for the State of Hawaii in 2000 Using the DSM-III-R Criteria, by Grade

(Entries are percentages %)



<u>FINDINGS</u>: Treatment needs for any substance abuse are generally highest in Hawaii District, where the proportion of 6th and 8th graders needing substance abuse treatment is nearly twice as high as compared to other districts. Windward District has more 10th graders who need substance abuse treatment than other districts. For 12th graders, substance abuse is equally high in Hawaii and Kauai Districts. Treatment needs are generally lowest in Honolulu District.

Notes: "Any Substance Abuse" includes students who are classified as either dependent on or abusers of alcohol, illicit drugs (marijuana, stimulants, depressants, or hallucinogens), or both alcohol and illicit drugs according to DSM-III-R criteria. Refer to Appendix B, Table 6, for estimated district-level treatment needs for grades 6 through 12.

#### SECTION IV – PREVENTION NEEDS

For decades, student surveys have addressed core predictor variables such as age of onset, adolescent attitudes and beliefs about substances, societal influences, and demographic background of the students. Recent attention, however, has turned to the role of risk and protective factors in the domains of community, family, school, and peer-individual to explain substance use initiation and continuation and to help communities prioritize prevention efforts. The risk and protective factor framework addresses measurable risk factors, which are precursors for drug and alcohol problems, and measurable protective factors, which "moderate or buffer" the impact of risk factors by improving coping, adaptation, and competence. This section overviews factors related to substance use and addresses the risk and protective framework.

Refer to Appendix C for tables that address various factors related to use, such as onset of substance use (Table 7), perceived harmfulness of substances (Table 8), perceived availability of substances (Table 9), frequent exposure to substance use by others (Table 10), friends' disapproval of substances (Table 11), and annual prevalence of antisocial behaviors (Tables 12 and 13). Refer to Appendix D for risk and protective factor tables designed to guide statewide prevention efforts. Figure 11 illustrates trends in perceived harmfulness of substances, and Figures 12 and 13 display trends in ability to purchase tobacco and alcohol, respectively.

- Alcohol and tobacco are generally tried earlier than other drugs, and are significant predictors of subsequent drug use. *Age of onset* for alcohol and tobacco use correlates with the use of every illicit drug surveyed, the total number of different drugs tried, amount of marijuana use, and substance abuse. Becoming a regular smoker and getting drunk at an early age are particularly robust predictors of subsequent drug use.
- Onset of alcohol and tobacco use occurs by the age of 9 for over 10% of the students. The peak age of alcohol and tobacco initiation is 9 years of age, with another large set of students reporting that they first tried alcohol between the ages of 13 and 15, and they first tried tobacco between the ages of 11 and 13. The majority of students who drink report that more serious alcohol abuse (getting drunk) occurs by age 13. Smoking cigarettes on a regular basis does not generally occur prior to age 12. Thus, alcohol and tobacco education efforts need to occur prior to age 9, with alcohol and tobacco messages reinforced in the following years.
- Onset of illicit drugs seems to be occurring as early as 9 years of age, but most typically between the ages of 13 and 14. The use of marijuana, however, is begun by 9 or 10 years of age, with a substantial portion of students reporting use of marijuana by the time they are 12 or 13 years old. Approximately a third of the students have used marijuana by the time they are 15 years old.
- **Beliefs about harmfulness** or risk associated with alcohol and tobacco use are down from previous years, but remain higher than nationwide reports. Risk perceptions for most illicit drug use, however, increased in 2000 and are typically higher than nationwide reports. One of the largest increases in risk perceptions was for the use of inhalants: Risk perceptions for inhalants are up by over 10 percentage points in every grade. The relationship between risk perceptions and drug use generally accounts for less than 10% of variance in substance use.

Figure 11a: Using Marijuana Occasionally

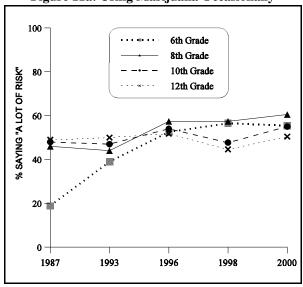


Figure 11b: Using Cocaine Once or Twice

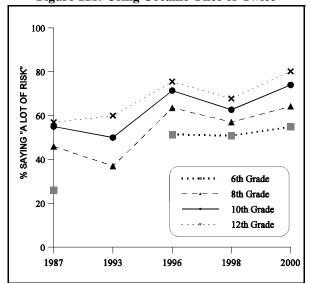


Figure 11c: Having 5+ Drinks Once or Twice Each Weekend

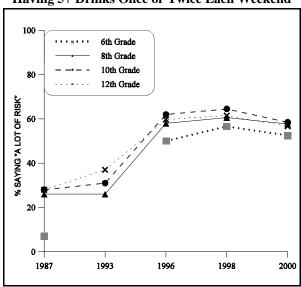
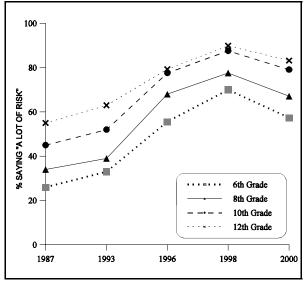


Figure 11d: Smoking 1+ Packs of Cigarettes Per Day



<u>FINDINGS</u>: Risk perceptions for marijuana increased in 2000 for students in grades 8, 10, and 12 and decreased for students in grade 6. Risk perceptions for cocaine use increased in 2000 for all grade levels. Risk perceptions for alcohol and tobacco decreased in 2000, but still remain higher than risk perceptions in the early 90's.

<u>Notes</u>: Entries reflect the percentage of students who responded "a lot of risk" associated with each substance. Perception of risk data was not reported in 1989 and 1991. The 1993 report did not include perception of risk data from 6th graders for cocaine and having five or more drinks per weekend.

- Perceived availability of substances is a slightly better predictor of substance use than risk perceptions. Students are more likely to use a substance as the substance becomes easier to obtain. Students in Hawaii see alcohol, tobacco, and illicit drugs as less obtainable than students nationwide. However, perceptions of substance availability are generally up from 1998 for all substances except for alcohol and cigarettes, with alcohol and cigarette availability perceptions decreasing in the lower grade levels. Reported availability perceptions of ecstasy in 2000, compared to 1998, are nearly twice as high for 10th and 12th graders, which could explain the rise in ecstasy use in these grades.
- In 1997, the State of Hawaii initiated several tobacco "stings" in an effort to decrease merchant sales of cigarettes to minors. The efforts seem to be paying off, with the reported ability to *purchase alcohol and tobacco* declining since 1996 for all grade levels except 12th grade. The percentage of students reporting that they were able to purchase tobacco from a store employee was nearly twice as high in 1996 as in 2000 for 6th, 8th, and 10th graders. The percentage of students reporting that they were able to purchase alcohol from a store employee was three times as high in 1996 as in 2000.
- Exposure to substance use by community, family, and friends is one of the best predictors of alcohol, tobacco, and other drug use. Approximately half of the 10th and 12th graders, a third of the 8th graders, and a fourth of the 6th graders are frequently exposed (once a week or more) to at least one individual who uses tobacco. The percentages of students frequently exposed to tobacco use are down from previous years. Over a third of the 10th and 12th graders, over a fourth of the 8th graders, and nearly a fifth of the 6th graders are frequently exposed to at least one individual who uses alcohol, and these percentages are also down from previous years. Less than a fourth of the students report frequent exposure to drugs, and the proportion of students reporting frequent illicit drug exposure has remained level over the years. Frequent exposure to alcohol is typically from parents. Frequent exposure to tobacco is from parents for the lower grades but from close friends or others in the student's environment for the higher grades. Frequent exposure to illicit drugs is typically from parents for 6th graders but from close friends and others in the environment for all other students.
- One of the variables most likely to protect an adolescent from substance abuse is *peer disapproval perceptions*. The great majority of students believe that their friends would not condone the use of illicit drugs, with disapproval ratings for illicit drugs, other than marijuana, at 80% or higher for all grade levels. The use of marijuana, on the other hand, is as accepted as drinking. Approximately a third of the 10th and 12th graders said that their friends "wouldn't care" or would "think it was cool" if they occasionally used marijuana or if they drank on the weekends. Smoking one or more packs of cigarettes a day, however, is not accepted by very many students.
- Certain subgroups are associated with greater alcohol, cigarette, and other drug use. Students from different *ethnic backgrounds* exhibit different patterns of alcohol and other drug use. Native Hawaiian and White students report the highest substance use; Chinese students report the lowest. *Sex differences* in prevalence reports are often minimal. Males have somewhat higher prevalence rates of any illicit drug use than females, whereas females generally have somewhat higher rates of alcohol and tobacco use particularly at the higher grade levels.

#### FIGURE 12 Trends in Student's Ability to Buy Tobacco, by Grade, 1996-2000

(Entries are percentages %)

Figure 12a: From a Vending Machine

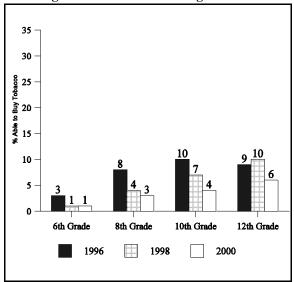


Figure 12b: From An Employee at a Store

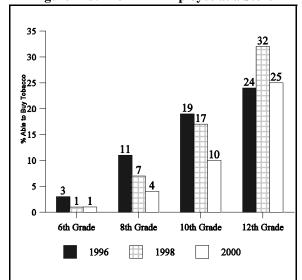


Figure 12c: From a Bar

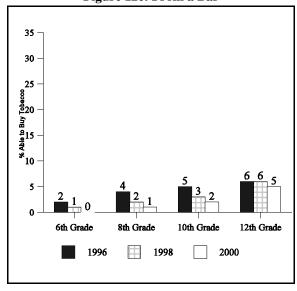
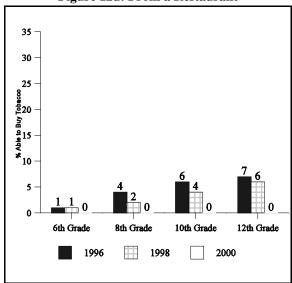


Figure 12d: From a Restaurant



<u>FINDINGS</u>: Ability to purchase tobacco from a vending machine, store employee, bar, and a restaurant decreased in 2000 for 8th, 10th, and 12th graders with some decreases representing more than a 50% change from 1996 percentages. For 6th graders, ability to purchase tobacco from a vending machine and store employee stabilized, and ability to purchase tobacco from a bar and from a restaurant decreased.

Note: Percentages are rounded to the nearest whole number.

FIGURE 13
Trends in Student's <u>Ability to Buy Alcohol</u> by Grade, 1996-2000

Figure 13a: From an Employee at a Store

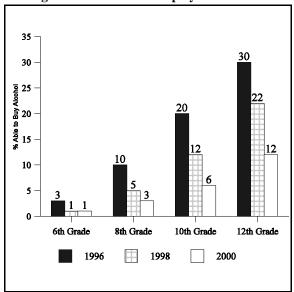


Figure 13b: From a Bar

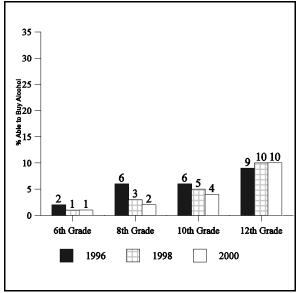
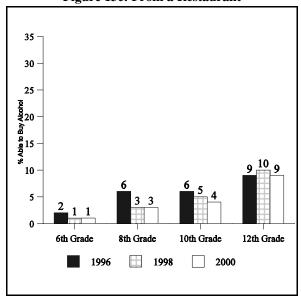


Figure 13c: From a Restaurant



<u>FINDINGS</u>: In 2000, ability to purchase alcohol from an employee at a store stabilized for 6th graders, but was down by nearly 50% for 8th, 10th, and 12th graders. In 2000, ability to purchase alcohol from a bar stabilized for 6th and 12th graders, but decreased for 8th and 10th graders. In 2000, ability to purchase alcohol from a restaurant stabilized for 6th and 8th graders, but decreased slightly for 10th and 12th graders.

Note: Percentages are rounded to the nearest whole number.

- Twenty-eight risk factors and 11 protective factors that are characteristic of the community, family, and school environments, and the students and their peer groups, were used in the current study to create *community profiles of risk and protective factors*. Risk factors predict increased likelihood of drug use, delinquency, and violent behaviors, whereas protective factors exert a positive influence or buffer the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. The study's findings related to specific school, community, and subgroup profiles are not covered in this report because they are too complex in nature to be easily summarized. The reader, however, is encouraged to obtain reports related to their community or subgroup of interest prior to implementing prevention efforts directed at reducing substance use and antisocial behaviors (ASBs) in a specific community.
- Annual Antisocial Behavior (ASB) prevalence rates are 10% or less for all ASBs, except for reports of being drunk or high at school. Nearly one-fifth of 10th (18%) and 12th graders (20%) reported that they were drunk or high at school at least once in the past year. The second most prevalent ASB is school suspension, with 5% of 6th graders, 10% of 8th graders, 8% of 10th graders, and 7% of 12th graders reporting that they were suspended from school at least once in the past year. Very few students (3% or less) reported carrying a handgun, taking a handgun to school, or attempting to steal a vehicle. At least 5%, but less than 10%, of the 10th and 12th graders reported that they have been arrested, have attacked someone with the idea of seriously hurting them, and have sold illegal drugs. Annual prevalence rates for having at least one best friend who has engaged in various ASBs is four times as high as self-reported engagement of ASBs. More than 10% and often more than 25% of the 8th, 10th, and 12th graders reported that they have at least one best friend who has been suspended from school, sold illegal drugs, stolen or tried to steal a vehicle, been arrested, dropped out of school, and been a member of a gang. Less than 10% of the students reported that they have at least one best friend who has taken a handgun to school.
- Scholars over the years have argued that substance use and ASBs are a function of the accumulation of multiple risk factors and multiple protective factors. The greater the number of risk factors to which an individual is exposed, the greater likelihood that he or she will use or abuse substances. The greater the number of protective factors to which an individual is exposed, the greater the likelihood that he or she will abstain from substance use. Examining the *risk and protective factor indexes* is an important starting point for determining which communities are in greatest need of prevention services.
- Comparisons across county on the risk factor index (i.e., the number of risk factors) show that a greater percentage of students in Hawaii County (24%) than the City & County of Honolulu (14%), Kauai County (17%), and Maui County (17%) are exposed to a high number of risk factors. County differences on the protective factor index (i.e., the number of protective factors) are less noticeable. Only 9% of Hawaii County students have high protection, compared to the City & County of Honolulu (10%), Kauai County (12%), and Maui County (11%). Thus, students in Hawaii County are most in need of prevention resources.

- Comparisons among males and females show that a greater proportion of males than females are exposed to a high number of risk factors and a low number of protective factors. Comparisons across ethnic groups show that larger proportions of Native Hawaiian and White students than students from other ethnic groups are exposed to a high number of risk factors. Nearly twice as many Native Hawaiians (22%) and Whites (21%) than Filipinos (13%) are exposed to a high number of risk factors; differences are even more pronounced when comparing Native Hawaiians and Whites to Chinese (6%) and Japanese (9%). Ethnic differences are less pronounced on the protective factor index.
- Understanding which risk and protective factors to address in various communities is assessed by examining which risk factors are above the statewide percentages and which protective factors are below the statewide percentages. The comparison to the statewide percentages provides information in determining the relative importance of each risk or protective factor level for the specific subgroup. Prevention efforts should move toward reversing or reducing elevated risk factors or enhancing low protective factors. The community profiles developed in the comprehensive report and in various community and school reports illustrate where prevention efforts should be prioritized in various communities. Table 15 summarizes the county and district profiles, and Table 16 summarizes the sex and ethnicity profiles.

#### SECTION V – CONCLUSION AND RECOMMENDATIONS

#### CONCLUSION

The results of the 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study indicate that substance use continues to be a significant problem affecting the youth of Hawaii, but current downward trends for use of illicit drugs, alcohol, and cigarettes are all encouraging. At all grade levels, lifetime prevalence reports for use of each illicit drug declined or remained stable, except for ecstasy use, which increased in grades 10 and 12. Alcohol remains the most prevalent substance, but alcohol prevalence rates in 2000 are lower than a decade earlier, when they were at an all-time low. Lifetime prevalence reports for cigarette use started to show a downward decline in 1998 in some grades and continued the encouraging decline in 2000. Monthly and daily prevalence reports for nearly all substances increased drastically from 1993 to 1996. This rise halted in 1998 at all grade levels and dropped or stabilized in 2000 for all substances except the use of ecstasy, which rose in the 10th and 12th grade. Most decreases in 2000 brought monthly prevalence reports down to 1993 levels, and some have even reached 1987 levels, the year the study first began. Hawaii follows nationwide trends, where ecstasy use has increased and cigarette use has declined. However, prevalence rates in Hawaii are generally lower than nationwide prevalence rates.

Coinciding with the decreasing prevalence rates are the declining estimated treatment needs among adolescents in the State of Hawaii. Total estimated treatment needs for students in grades 6 though 12 statewide were 16% in 1998 and dropped to 13% in 2000. However, treatment needs in 2000 are still higher than they were in 1996 (10%). Treatment needs are highest in Hawaii County, where 20% of the students are estimated to need treatment. Prevention needs are also highest in Hawaii County because students there are exposed to more risk factors and fewer protective factors. Declining substance use rates and declining treatment needs can continue in the State of Hawaii as long as prevention efforts are directed at reducing elevated risk factors and promoting protective factors.

#### RECOMMENDATIONS

Although the alcohol, tobacco, and other drug use study was in a school setting, an examination of factors related to adolescent substance use and abuse show that effective prevention and treatment programs must extend well beyond the school campus. Effective prevention and treatment programs require the combined efforts of communities, law enforcement, families, media, and ongoing school-based substance abuse programs. The Hawaii Department of Health, Alcohol and Drug Abuse Division (ADAD), makes the following recommendations based on the findings from *The 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study (1987-2000): Adolescent Prevention and Treatment Needs Assessment* (Klingle, 2001).

- MAKE SUBSTANCE ABUSE PREVENTION A PRIORITY IN EVERY COMMUNITY. Research has shown that prevention plans that take into account community-level risk and protective factors have the greatest potential for successfully decreasing the rates of youth substance abuse. Perceived availability of substances and exposure to people using substances are critical risk factors in substance use and abuse. Thus, community efforts to reduce availability through voluntary efforts by merchants and through community enforcement of merchant compliance with Federal and State Laws prohibiting sales of alcohol and tobacco products to minors must be continued and increased. Tightening of local ordinances restricting drinking and cigarette smoking in public settings is needed to decrease exposure to substance abuse.
- STRENGTHEN THE FAMILY'S ROLE AND SKILLS IN SUBSTANCE ABUSE PREVENTION EFFORTS. Parents and family members must recognize that exposure to substance use by family members puts children and adolescents at great risk for substance use and abuse. Parents' expressed disapproval of substance use is a powerful deterrent against substance use and abuse by children. The risk and protective factors addressed in this study suggest that parents need to take an active role in their children's lives, including talking to them about the dangers of substance use, monitoring their activities, understanding their problems, and being prepared to support their need to receive treatment for substance abuse.
- INCREASE MASS MEDIA COVERAGE ON SUBSTANCE ABUSE
  PREVENTION AND TREATMENT. Community efforts must include extensive mass media coverage designed to alter the myth that substance use is normative behavior (e.g., "everyone is using substances"), to educate parents regarding their critical role in substance use prevention and treatment, to teach parents skills for better family communication, and to increase public awareness regarding substance abuse symptoms and treatment programs. Components of a comprehensive media campaign could include television public service announcements, featured news stories, and radio programming. Additionally, distribution of printed material in workplaces, physicians' offices, and health care agencies could be used to increase public awareness and to teach community members skills they could use to modify their substance use behaviors and behaviors of others.

- INCREASE COMMUNITY AWARENESS OF THE SERIOUS CONSEQUENCES OF UNDERAGE ALCOHOL USAGE. Communities need to employ effective strategies designed to decrease underage alcohol usage. Underage alcohol usage initiatives should include limiting access to alcohol through stricter enforcement of laws and regulations designed to prohibit alcohol use by minors, and providing prevention and education activities in schools and within communities that deter youth alcohol usage. Media and public relation efforts need to raise awareness of the problems and solutions to underage drinking.
- STRENGTHEN SCHOOL-BASED SUBSTANCE ABUSE PREVENTION
  PROGRAMS IN EVERY GRADE. A comprehensive school-based substance abuse prevention program must begin no later than the fourth grade. School prevention efforts must continue to address the dangers and risk of tobacco, alcohol, and illicit drug use, but more importantly, students must also be educated that the majority of their peers are not using substances. Peers are important influences in both prevention and treatment of substance abuse. Existing school-based prevention programs could be enhanced by developing components designed to alter the myth that "everyone is doing drugs," to enact positive peer pressure, and to educate students of the warning signs of substance abuse so that they can encourage and influence peers who need treatment. As educational ambitions of students rise, substance use drops. Thus, school efforts to increase the educational aspirations of students at an earlier grade will have a positive effect on substance abstinence.
- ENSURE THAT EVERY ADOLESCENT WHO HAS SUBSTANCE ABUSE PROBLEMS GETS TREATMENT. Although substance abuse is a community problem, school-based treatment programs make treatment easily accessible to youth who need treatment. Accessible school-based substance treatment programs should be sustained and expanded to all high schools and intermediate schools. Material about substance abuse treatment and counseling programs must be distributed more widely in schools and must thoroughly emphasize the fact that these services are strictly confidential.

### APPENDIX A PREVALENCE TABLES

Table 1: Trends in <u>Lifetime</u> Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000.

Table 1 lists the percentage of students, in each grade, using various substances at least once in their lifetimes and represents the proportion of students who have experimented with various substances. The table provides Hawaii lifetime prevalence trend data from 1987 to 2000 and records the percentage point change in lifetime prevalence reports from 1998 to 2000.

Table 2: Trends in Monthly Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000.

Table 2 lists the percentage of students, in each grade, using various substances at least once in past 30 days and represents the proportion of students who are currently using various substances. The table provides Hawaii monthly prevalence trend data from 1987 to 2000 and records the percentage point change in monthly prevalence reports from 1998 to 2000.

Table 3: Trends in <u>Daily Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000.</u>

Table 3 lists the percentage of students, in each grade, using various substances on 20 or more occasions in the past 30 days and represents the proportion of students who are using various substances on a daily or near-daily basis. Daily substance use was first assessed in 1996. The table provides data from the 1996, 1998, and 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study and records the percentage point change in prevalence reports from 1998 to 2000.

Table 4: A Comparison of Nationwide versus Hawaii Substance Usage Rates, by Grade, 2000

Table 4 displays data from the 2000 Hawaii Student Alcohol, Tobacco, and Other Drug Use Study and the national comparison data from the 2000 Monitoring the Future Study. The table provides lifetime, monthly and daily prevalence data across each grade level for each substance. The national Monitoring the Future Study does not survey students in grade 6 so comparison data at the national level is not available for this grade.

TABLE 1
Trends in <u>Lifetime</u> Prevalence of Various Substances
for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000

	1987	1989	1991	1993	1996	1998	2000	1998-2000 change
ANY DRUG, INCLUDING INHALANTS <sup>a</sup>								
6th Grade	14.4	11.5	9.2	12.4	13.4	13.7	8.3	-5.4
8th Grade	27.1	22.3	21.6	27.3	29.6	26.3	23.3	-3.0
10th Grade	38.7	33.3	33.5	38.7	41.3	42.9	36.9	-6.0
12th Grade	50.5	41.4	39.3	42.0	47.7	50.3	48.4	-1.9
ANY ILLICIT DRUG, EXCLUDING INHALANTS <sup>b</sup>								
6th Grade	_	_	_	_	6.4	6.6	4.2	-2.4
8th Grade	_	_	_	_	23.0	20.9	18.5	-2.4
10th Grade	_	_	_	_	37.8	40.7	35.2	-5.5
12th Grade	_	_	_	_	45.9	48.9	47.8	-1.1
Marijuana								
6th Grade	3.0	2.5	1.7	2.4	5.1	4.9	2.4	-2.5
8th Grade	16.5	13.1	12.3	16.7	21.5	19.2	15.9	-3.3
10th Grade	32.9	26.2	25.7	31.4	36.5	39.2	33.2	-6.0
12th Grade	46.0	36.2	34.3	37.1	44.7	47.7	45.8	-1.9
Cocaine								
6th Grade	0.8	0.8	0.7	1.0	1.9	2.0	0.4	-1.6
8th Grade	3.8	4.3	3.4	4.0	5.3	4.2	2.2	-2.0
10th Grade	8.0	7.7	6.4	7.2	5.8	5.3	3.5	-1.8
12th Grade	14.8	10.5	9.1	8.2	7.9	6.0	5.8	-0.2
Inhalants								
6th Grade	10.6	8.7	7.2	9.4	9.7	10.1	5.3	-4.8
8th Grade	14.9	13.0	12.7	16.6	15.2	12.5	9.9	-2.6
10th Grade	13.4	12.8	14.2	15.6	11.2	10.2	7.0	-3.2
12th Grade	11.5	11.2	10.2	12.0	7.9	8.1	5.7	-2.4
Methamphetamine								
6th Grade		1.4	1.0	1.3	1.4	1.8	0.5	-1.3
8th Grade	_	6.1	4.3	4.9	4.4	4.6	2.3	-2.3
10th Grade	_	9.9	7.0	7.8	5.9	6.7	4.5	-2.2
12th Grade	_	11.7	8.9	8.4	7.5	7.7	5.8	-1.9
Heroin or Other Opiates								
6th Grade	1.0	0.9	0.6	0.8	1.3	1.4	0.2	-1.2
8th Grade	3.3	2.6	2.4	2.7	3.4	2.7	1.2	-1.5
10th Grade	4.4	4.2	4.1	4.1	1.9	2.3	1.3	-1.0
12th Grade	6.0	5.1	4.6	5.1	2.7	2.0	1.8	-0.2
Sedatives/Tranquilizers								
6th Grade	1.3	0.7	0.8	0.9	1.4	1.6	0.4	-1.2
8th Grade	2.7	2.8	2.5	2.7	3.6	3.0	1.8	-1.2
10th Grade	4.7	4.1	4.2	4.0	3.9	3.9	3.2	-0.7
12th Grade	6.3	4.5	4.2	4.3	4.8	3.9	3.8	-0.1

(Table continued on next page)

# TABLE 1 (continued) Trends in <u>Lifetime</u> Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000

(Entries are percentages %)

	1987	1989	1991	1993	1996	1998	2000	1998-2000 change
Ecstasy/MDMA								
6th Grade		—	—		—	1.4	0.1	-1.3
8th Grade		—	—		_	2.9	2.0	-0.9
10th Grade		—	—		—	4.1	5.3	+1.2
12th Grade		—	—		—	5.3	8.4	+3.1
Hallucinogens								
6th Grade	0.9	1.0	0.8	1.2	1.6	1.9	0.4	-1.5
8th Grade	3.4	4.1	3.5	4.5	6.5	4.6	2.9	-1.7
10th Grade	6.3	6.6	7.1	9.1	7.8	9.2	6.4	-2.8
12th Grade	8.3	7.9	8.6	10.8	12.0	11.6	9.9	-1.7
Steroids								
6th Grade	3.3	2.2	2.2	1.9	1.5	2.0	1.3	-0.7
8th Grade	5.4	4.0	3.1	3.1	2.8	2.6	2.2	-0.4
10th Grade	4.8	4.1	3.8	3.7	2.2	2.1	1.7	-0.4
12th Grade	4.5	4.4	3.5	3.3	2.4	1.6	1.8	+0.2
Diuretics/Laxative								
6th Grade	_	_	_	_	2.3	2.4	1.2	-1.2
8th Grade	_	_	_	_	5.4	4.4	3.2	-1.2
10th Grade	_	_	_	_	6.5	5.4	4.1	-1.3
12th Grade	_	_	_	_	7.2	6.5	5.3	-1.2
USE OF ANY ALCOHOL								
6th Grade	47.6	34.6	31.1	34.9	29.8	31.6	24.2	-7.4
8th Grade	64.7	57.3	55.8	57.4	54.0	52.6	49.2	-3.4
10th Grade	76.1	71.1	72.9	73.3	73.4	72.3	67.1	-5.2
12th Grade	85.9	80.5	79.8	79.2	79.7	81.2	77.2	-4.0
Beer or Wine <sup>c</sup>								
6th Grade	36.0	25.4	22.0	24.5	28.5	30.3	23.3	-7.0
8th Grade	52.3	48.5	47.8	48.5	52.1	50.3	47.2	-3.1
10th Grade	65.2	63.4	65.4	64.7	71.2	69.7	64.5	-5.2
12th Grade	76.4	71.8	71.8	69.7	77.7	78.7	74.9	-3.8
Hard Liquor								
6th Grade	11.1	8.7	7.3	8.7	9.4	9.3	5.1	-4.2
8th Grade	28.2	25.9	25.9	28.9	32.9	31.1	25.5	-5.6
10th Grade	47.7	43.3	47.3	49.2	56.8	56.0	51.0	-5.0
12th Grade	62.6	56.7	57.7	57.6	68.2	69.8	66.3	-3.5
Been Drunk								
6th Grade		_	_	_	5.6	5.8	2.9	-2.9
8th Grade		_	_		22.9	20.4	17.3	-3.1
10th Grade		_	_	_	40.1	40.7	37.5	-3.2
12th Grade		_	_	_	52.2	55.4	53.0	-2.4

(Table continued on next page)

## TABLE 1 (continued) Trends in <u>Lifetime</u> Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000

(Entries are percentages %)

	1987	1989	1991	1993	1996	1998	2000	1998-2000 change
Drank Alcohol Regularly d								
6th Grade	_	_			_		2.5	_
8th Grade	_			_	_	_	12.3	
10th Grade		_			_	_	25.7	_
12th Grade	_			_	_	_	39.9	
USE OF ANY TOBACCO								
6th Grade	_	_	_	_	24.2	22.2	12.7	-9.5
8th Grade	_	_	_	_	46.6	44.1	37.2	-6.9
10th Grade	_	_	_	_	58.4	58.0	50.5	-7.5
12th Grade	_	_	_	_	64.7	63.6	60.0	-3.6
Cigarettes								
6th Grade	7.3	11.6	9.6	12.6	23.6	21.5	12.2	-9.3
8th Grade	26.4	32.5	33.2	37.4	45.9	43.1	36.3	-6.8
10th Grade	38.9	43.3	45.6	49.3	57.4	57.0	49.5	-7.5
12th Grade	48.2	49.5	49.6	50.7	62.7	62.4	58.8	-3.6
Regularly Smoke Cigarettes <sup>e</sup>								
6th Grade	_	_	_	_	6.3	6.1	2.1	-4.0
8th Grade	_	_	_	_	19.9	18.6	11.8	-6.8
10th Grade	_	_	_	_	26.6	28.3	19.3	-9.0
12th Grade	_	_	_	_	29.5	31.4	25.6	-5.8
Smokeless Tobacco								
6th Grade	3.2	2.8	2.8	3.1	3.5	3.1	1.2	-1.9
8th Grade	8.2	6.2	6.8	7.1	8.1	5.9	3.6	-2.3
10th Grade	13.3	10.5	10.0	10.1	10.6	10.2	5.3	-4.9
12th Grade	17.5	14.4	13.7	13.0	16.8	15.9	10.0	-5.9

Approximate Ns for 2000: 6th grade = 9,375; 8th grade = 7,249; 10th grade = 5,130; 12th grade = 4,106.

<u>Notes</u>: '—' indicates data not available. Nationwide indicates 2000 Monitoring the Future Study. <u>Lifetime Prevalence</u> is defined as use at least once in a student's lifetime.

- <sup>a</sup> <u>Any Drug, Including Inhalants</u> includes the use of marijuana, cocaine, inhalants, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids. Ecstasy was not included in the 1987-1996 reports.
- b <u>Any Illicit Drug, Excluding Inhalants</u> includes the use of marijuana, cocaine, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids. Ecstasy was not included in the 1987-1996 reports.
- <sup>c</sup> In 1987-1993, beer and wine were measured separately. This table reports the higher number for the beer and wine percentages reported in the 1987-1993 report. Students were asked if they tried beer or wine "more than a few sips."
- d <u>Drank Alcohol Regularly</u> is defined as drinking at least once or twice a month.
- <sup>e</sup> Students were asked if they have ever smoked cigarettes on a regular basis. Students in this category may not be regular smokers anymore.

TABLE 2
Trends in Monthly Prevalence of Various Substances
for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000

	1987	1989	1991	1993	1996	1998	2000	1998-2000 change
ANY DRUG, INCLUDING INHALANTS <sup>a</sup>								
6th Grade	1.7	1.8	1.5	2.1	7.7	6.7	4.2	-2.5
8th Grade	7.7	8.2	7.4	10.5	18.4	14.7	11.8	-2.9
10th Grade	14.3	14.2	14.7	18.6	22.7	23.6	19.0	-4.6
12th Grade	19.6	17.1	16.5	19.7	26.3	24.5	24.7	+0.2
ANY ILLICIT DRUG, EXCLUDING INHALANTS <sup>b</sup>								
6th Grade	_	_	_	_	4.3	3.7	2.4	-1.3
8th Grade	_	_	_	_	15.7	13.0	10.3	-2.7
10th Grade	_	_	_	_	22.0	23.3	18.6	-4.7
12th Grade	_	_	_	_	25.9	24.3	24.5	+0.2
Marijuana								
6th Grade	0.4	0.6	0.4	0.5	3.4	2.6	1.3	-1.3
8th Grade	5.2	4.9	4.9	7.5	14.8	11.8	8.9	-2.9
10th Grade	12.4	11.1	12.7	16.0	21.2	22.3	17.2	-5.1
12th Grade	17.2	13.9	14.6	17.9	25.0	23.0	22.7	-0.3
Cocaine								
6th Grade	0.3	0.3	0.2	0.3	1.3	1.3	0.4	-0.9
8th Grade	1.4	1.7	1.3	1.6	3.4	2.6	1.2	-1.4
10th Grade	2.7	3.0	2.4	2.7	2.7	2.3	1.3	-1.0
12th Grade	4.8	3.8	3.5	2.4	3.6	1.8	1.5	-0.3
Inhalants								
6th Grade	1.0	0.9	0.9	1.3	5.1	4.5	2.4	-2.1
8th Grade	2.7	3.4	2.6	3.7	7.2	4.8	3.2	-1.6
10th Grade	2.3	3.0	2.8	3.0	3.1	2.4	1.5	-0.9
12th Grade	1.8	2.5	1.8	2.1	2.4	1.4	0.8	-0.6
Methamphetamine								
6th Grade		0.4	0.2	0.3	1.0	1.0	0.3	-0.7
8th Grade		2.7	1.6	1.9	3.0	3.1	1.1	-2.0
10th Grade		4.8	2.9	3.2	2.8	3.0	1.6	-1.4
12th Grade		5.5	3.4	3.1	2.8	2.3	1.6	-0.7
Heroin or Other Opiates								
6th Grade	0.2	0.2	0.1	0.2	1.0	0.8	0.1	-0.7
8th Grade	0.9	0.9	1.0	1.0	2.4	1.8	0.8	-1.0
10th Grade	1.5	1.5	1.3	1.5	1.4	1.4	0.5	-0.9
12th Grade	1.5	1.5	1.4	1.4	1.7	0.7	0.5	-0.2
Sedatives/Tranquilizers								
6th Grade	0.2	0.3	0.3	0.3	0.9	0.7	0.2	-0.5
8th Grade	0.9	1.1	1.1	0.9	2.5	2.1	1.0	-1.1
10th Grade	1.4	1.5	1.1	1.5	1.9	1.7	1.2	-0.5
12th Grade	1.3	1.3	1.0	0.9	2.0	1.6	1.6	0.0

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# TABLE 2 (continued) Trends in Monthly Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000

(Entries are percentages %)

	1987	1989	1991	1993	1996	1998	2000	1998-2000 change
Ecstasy/MDMA								
6th Grade	_	_		_		0.7	0.1	-0.6
8th Grade	_	_	_	_	_	2.0	1.3	-0.7
10th Grade	_	_		_		1.9	2.9	+1.0
12th Grade	_	_		_		1.7	3.9	+2.2
Hallucinogens								
6th Grade	0.2	0.3	0.2	0.4	1.0	0.9	0.3	-0.6
8th Grade	1.0	1.6	1.3	1.5	4.2	2.8	1.4	-1.4
10th Grade	1.9	2.8	2.9	3.4	4.3	3.6	2.2	-1.4
12th Grade	2.2	2.6	2.8	3.5	5.3	3.1	2.0	-1.1
Steroids								
6th Grade	0.8	0.5	0.6	0.5	1.0	1.1	0.8	-0.3
8th Grade	2.0	1.5	1.4	1.1	2.2	1.8	1.3	-0.5
10th Grade	1.9	1.8	1.7	1.9	1.4	1.3	1.0	-0.3
12th Grade	1.8	2.0	1.2	1.7	1.7	1.0	0.9	-0.1
Diuretics/Laxative								
6th Grade	_		_	_	1.3	1.2	0.7	-0.5
8th Grade	_		_	_	3.9	2.6	1.5	-1.1
10th Grade	—	—	—	_	3.2	2.5	2.0	-0.5
12th Grade	_		_	_	3.3	2.1	2.0	-0.1
USE OF ANY ALCOHOL								
6th Grade	3.2	3.1	2.8	2.5	14.4	12.0	9.1	-2.9
8th Grade	14.0	13.2	14.0	15.2	30.2	25.3	22.1	-3.2
10th Grade	28.0	27.1	28.3	28.8	41.2	37.6	32.5	-5.1
12th Grade	42.7	37.8	38.6	35.4	46.3	45.0	43.2	-1.8
Beer or Wine <sup>c</sup>								
6th Grade	2.1	1.9	1.7	1.6	13.7	11.4	8.7	-2.7
8th Grade	10.1	10.0	10.3	11.5	28.6	23.9	20.3	-3.6
10th Grade	21.6	21.0	22.2	22.9	38.8	34.6	28.9	-5.7
12th Grade	35.5	30.6	31.2	29.4	43.6	41.7	39.1	-2.6
Hard Liquor								
6th Grade	0.6	0.8	0.5	0.7	6.5	5.4	3.2	-2.2
8th Grade	5.5	5.7	6.3	7.8	22.1	17.6	14.8	-2.8
10th Grade	13.4	14.2	16.0	16.7	31.5	29.1	26.7	-2.4
12th Grade	20.4	19.9	21.4	20.2	36.5	35.1	35.5	+0.4
USE OF ANY TOBACCO								
6th Grade	_	_	_	_	11.2	8.6	4.0	-4.6
8th Grade	_		_		26.1	19.1	12.5	-6.6
10th Grade	_		_		26.7	24.9	17.1	-7.8
12th Grade	_	_	_	_	28.9	29.7	23.4	-6.3

(Table continued on next page)

### TABLE 2 (continued) Trends in Monthly Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1987-2000

(Entries are percentages %)

	1987	1989	1991	1993	1996	1998	2000	1998-2000 change
Cigarettes								
6th Grade	0.8	1.6	1.5	2.1	10.8	8.1	3.8	-4.3
8th Grade	7.9	10.1	11.3	14.3	25.5	18.7	12.1	-6.6
10th Grade	16.4	17.5	19.7	22.2	25.8	24.1	16.6	-7.5
12th Grade	22.4	21.5	22.1	23.0	27.9	28.9	22.6	-6.3
Smokeless Tobacco								
6th Grade	0.4	0.4	0.5	0.5	1.9	1.5	0.5	-1.0
8th Grade	1.0	1.5	1.7	2.0	4.5	2.9	1.5	-1.4
10th Grade	2.1	2.6	2.7	2.8	3.7	3.0	1.4	-1.6
12th Grade	3.8	3.3	3.5	3.6	5.2	3.1	2.0	-1.1

Approximate Ns for 2000: 6th grade = 9,375; 8th grade = 7,249; 10th grade = 5,130; 12th grade = 4,106.

<u>Notes</u>: '—' indicates data not available. Nationwide indicates 2000 Monitoring the Future Study. <u>Monthly Prevalence</u> is defined as use at least once in the past 30 days.

<sup>&</sup>lt;sup>a</sup> <u>Any Drug, Including Inhalants</u> includes the use of marijuana, cocaine, inhalants, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids. Ecstasy was not included in the 1987-1996 reports.

b <u>Any Illicit Drug, Excluding Inhalants</u> includes the use of marijuana, cocaine, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids. Ecstasy was not included in the 1987-1996 reports.

<sup>&</sup>lt;sup>c</sup> In 1987-1993, beer and wine were measured separately. This table reports the higher number for the beer and wine percentages reported in the 1987-1993 report.

TABLE 3
Trends in <u>Daily</u> Prevalence of Various Substances
for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1996-2000

(Entries are percentages %)

	1996	1998	2000	1998-2000 change
ANY DRUG, INCLUDING INHALANTS <sup>a</sup>				
6th Grade	1.2	1.0	0.5	-0.5
8th Grade	4.0	3.4	2.0	-1.4
10th Grade	5.2	5.3	4.0	-1.3
12th Grade	7.3	5.7	5.1	-0.6
ANY ILLICIT DRUG, EXCLUDING INHALANTS b				
6th Grade	0.8	0.7	0.4	-0.3
8th Grade	3.6	3.1	1.9	-1.2
10th Grade	4.9	5.2	4.0	-1.2
12th Grade	6.7	5.7	5.1	-0.6
Marijuana				
6th Grade	0.7	0.4	0.2	-0.2
8th Grade	3.1	2.4	1.5	-0.9
10th Grade	4.2	4.7	3.4	-1.3
12th Grade	6.4	5.2	4.6	-0.6
Cocaine				
6th Grade	0.4	0.2	0.1	-0.1
8th Grade	1.1	0.6	0.2	-0.4
10th Grade	0.8	0.6	0.1	-0.5
12th Grade	0.9	0.1	0.2	+0.1
Inhalants				
6th Grade	0.5	0.5	0.2	-0.3
8th Grade	1.3	0.7	0.3	-0.4
10th Grade	0.7	0.6	0.1	-0.5
12th Grade	0.6	0.3	0.1	-0.2
Methamphetamine				
6th Grade	0.2	0.1	0.0	-0.1
8th Grade	0.9	0.5	0.1	-0.4
10th Grade	0.8	0.6	0.3	-0.3
12th Grade	0.6	0.4	0.3	-0.1
Heroin or Other Opiates				
6th Grade	0.3	0.1	0.0	-0.1
8th Grade	0.9	0.4	0.1	-0.3
10th Grade	0.7	0.4	0.1	-0.3
12th Grade	0.6	0.1	0.2	+0.1
Sedatives/Tranquilizers				
6th Grade	0.3	0.2	0.0	-0.2
8th Grade	0.9	0.4	0.1	-0.3
10th Grade	0.7	0.4	0.2	-0.2
12th Grade	0.6	0.2	0.2	0.0

## TABLE 3 (continued) Trends in <u>Daily</u> Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1996-2000

(Entries are percentages %)

	1996	1998	2000	1998-2000 change
Ecstasy/MDMA				
6th Grade	_	0.1	0.0	-0.1
8th Grade	_	0.5	0.1	-0.4
10th Grade	_	0.5	0.2	-0.3
12th Grade	_	0.2	0.3	+0.1
Hallucinogens				
6th Grade	0.3	0.1	0.0	-0.1
8th Grade	1.1	0.5	0.2	-0.3
10th Grade	0.6	0.6	0.3	-0.3
12th Grade	0.8	0.3	0.3	0.0
Steroids				
6th Grade	0.3	0.3	0.1	-0.2
8th Grade	1.0	0.4	0.2	-0.2
10th Grade	0.7	0.4	0.2	-0.2
12th Grade	0.7	0.3	0.2	-0.1
Diuretics/Laxative				
6th Grade	0.4	0.3	0.1	-0.2
8th Grade	1.1	0.7	0.3	-0.4
10th Grade	1.0	0.6	0.4	-0.2
12th Grade	0.9	0.4	0.5	+0.1
USE OF ANY ALCOHOL				
6th Grade	0.9	0.9	0.7	-0.2
8th Grade	3.1	2.8	1.6	-1.2
10th Grade	3.8	3.8	2.4	-1.4
12th Grade	4.7	3.2	3.5	+0.3
Beer or Wine				
6th Grade	0.8	0.7	0.6	-0.1
8th Grade	2.8	2.4	1.4	-1.0
10th Grade	3.4	3.2	2.1	-1.1
12th Grade	4.1	2.7	3.1	+0.4
Hard Liquor				
6th Grade	0.7	0.5	0.2	-0.3
8th Grade	2.7	2.2	1.2	-1.0
10th Grade	2.9	3.0	2.0	-1.0
12th Grade	3.4	2.3	2.6	+0.3
USE OF ANY TOBACCO				
6th Grade	1.1	0.9	0.4	-0.5
8th Grade	6.6	4.9	2.3	-2.6
10th Grade	10.8	10.6	6.2	-4.4
12th Grade	14.5	14.5	12.1	-2.4

### TABLE 3 (continued) Trends in <u>Daily</u> Prevalence of Various Substances for Hawaii Sixth, Eighth, Tenth, and Twelfth Grade Students, 1996-2000

(Entries are percentages %)

	1996	1998	2000	1998-2000 change
Cigarettes				
6th Grade	1.1	0.9	0.4	-0.5
8th Grade	6.5	4.8	2.2	-2.6
10th Grade	10.6	10.4	6.1	-4.3
12th Grade	14.3	14.2	11.8	-2.4
½ Pack +/day °				
6th Grade			0.4	_
8th Grade			1.9	_
10th Grade			3.1	_
12th Grade			5.9	_
Smokeless Tobacco				
6th Grade	0.2	0.1	0.1	0.0
8th Grade	1.1	0.7	0.3	-0.4
10th Grade	0.8	0.7	0.3	-0.4
12th Grade	1.4	0.5	0.4	-0.1

Approximate Ns for 2000: 6th grade = 9,375; 8th grade = 7,249; 10th grade = 5,130; 12th grade = 4,106.

<u>Notes</u>: '—' indicates data not available. Nationwide indicates 2000 Monitoring the Future Study. <u>Daily Prevalence</u> is defined as use on 20 or more occasions in the past 30 days.

<sup>&</sup>lt;sup>a</sup> <u>Any Drug, Including Inhalants</u> includes the use of marijuana, cocaine, inhalants, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids.

b <u>Any Illicit Drug, Excluding Inhalants</u> includes the use of marijuana, cocaine, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids.

Students were asked how frequently they smoked cigarettes in the past 30 days. Answer choices included (1) not at all, (2) less than one cigarette per day, (3) one or five cigarettes per day, (4) about ½ pack per day, (5) about one pack per day, and (6) more than one pack per day. ½ Pack +/day includes students answering about ½ pack per day, about one pack per day, or more than one pack per day.

TABLE 4
A Comparison of Nationwide versus Hawaii Substance Usage Rates, by Grade, 2000 (Entries are percentages %)

	Lifet	ime	30-Г	Day	Dai	l <b>y</b>
	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000
ANY ILLICIT DRUG, INCLUDING INHALANTS <sup>a</sup>						
6th Grade	_	8.3	_	4.2	_	0.5
8th Grade	35.1	23.3	14.4	11.8	_	2.0
10th Grade	49.3	36.9	23.6	19.0	_	4.0
12th Grade	57.0	48.4	26.4	24.7	_	5.1
ANY ILLICIT DRUG, EXCLUDING INHALANTS b						
6th Grade	_	4.2	_	2.4	_	0.4
8th Grade	26.8	18.5	11.9	10.3	_	1.9
10th Grade	45.6	35.2	22.5	18.6	_	4.0
12th Grade	54.0	47.8	24.9	24.5	_	5.1
Marijuana						
6th Grade	_	2.4	_	1.3	—	0.2
8th Grade	20.3	15.9	9.1	8.9	1.3	1.5
10th Grade	40.3	33.2	19.7	17.2	3.8	3.4
12th Grade	48.8	45.8	21.6	22.7	6.0	4.6
Cocaine						
6th Grade	_	0.4	_	0.4	_	0.1
8th Grade	4.5	2.2	1.2	1.2	_	0.2
10th Grade	6.9	3.5	1.8	1.3	_	0.1
12th Grade	8.6	5.8	2.1	1.5	_	0.2
Inhalants						
6th Grade	_	5.3	_	2.4	_	0.2
8th Grade	17.9	9.9	4.5	3.2	_	0.3
10th Grade	16.6	7.0	2.6	1.5	_	0.1
12th Grade	14.2	5.7	2.2	0.8	_	0.1
Methamphetamine						
6th Grade	_	0.5	_	0.3	_	0.0
8th Grade	4.2	2.3	0.8	1.1	_	0.1
10th Grade	6.9	4.5	2.0	1.6	_	0.3
12th Grade	7.9	5.8	1.9	1.6	_	0.3
Heroin or other Opiates						
6th Grade		0.2		0.1		0.0
8th Grade	1.9	1.2	0.5	0.8		0.1
10th Grade	2.2	1.3	0.5	0.5		0.1
12th Grade	2.4	1.8	0.7	0.5	_	0.2
Sedatives/Tranquilizers						
6th Grade	_	0.4	_	0.2	_	0.0
8th Grade	4.4	1.8	1.4	1.0		0.1
10th Grade	8.0	3.2	2.5	1.2		0.2
12th Grade	8.9	3.8	2.6	1.6		0.2

TABLE 4 (continued) A Comparison of Nationwide versus Hawaii Substance Usage Rates, by Grade, 2000

(Entries are percentages %)

	Lifet	ime	30-D	ay	Dail	l <b>y</b>
	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000
Ecstasy/MDMA						
6th Grade	_	0.1	_	0.1	_	0.0
8th Grade	4.3	2.0	1.4	1.3	_	0.1
10th Grade	7.3	5.3	2.6	2.9	_	0.2
12th Grade	11.0	8.4	3.6	3.9		0.3
Hallucinogens						
6th Grade	_	0.4	_	0.3		0.0
8th Grade	4.6	2.9	1.2	1.4		0.2
10th Grade	8.9	6.4	2.3	2.2		0.3
12th Grade	13.0	9.9	2.6	2.0		0.3
Steroids						
6th Grade	_	1.3	_	0.8		0.1
8th Grade	3.0	2.2	0.8	1.3		0.2
10th Grade	3.5	1.7	1.0	1.0		0.2
12th Grade	2.5	1.8	0.8	0.9		0.2
Diuretics/Laxatives						
6th Grade	_	1.2	_	0.7		0.1
8th Grade	_	3.2	_	1.5	_	0.3
10th Grade	_	4.1	_	2.0	_	0.4
12th Grade	_	5.3	_	2.0	_	0.5
USE OF ANY ALCOHOL						
6th Grade	_	24.2	_	9.1		0.7
8th Grade	51.7	49.2	22.4	22.1	0.8	1.6
10th Grade	71.4	67.1	41.0	32.5	1.8	2.4
12th Grade	80.3	77.2	50.0	43.2	2.9	3.5
Beer/Wine <sup>c</sup>						
6th Grade	_	23.3	_	8.7		0.6
8th Grade	_	47.2	_	20.3	_	1.4
10th Grade	_	64.5	_	28.9	_	2.1
12th Grade	_	74.9	_	39.1	_	3.1
Hard Liquor						
6th Grade	_	5.1	_	3.2	_	0.2
8th Grade	_	25.5	_	14.8	_	1.2
10th Grade	_	51.0	_	26.7	_	2.0
12th Grade	_	66.3	_	35.5	_	2.6
Been Drunk						
6th Grade	_	2.9	_	_	_	
8th Grade	25.1	17.3	8.3	_	_	
10th Grade	49.3	37.5	23.5	_	_	
12th Grade	62.3	53.0	32.3		_	

### TABLE 4 (continued) A Comparison of Nationwide versus Hawaii Drug Substance Rates, by Grade, 2000

(Entries are percentages %)

	Lifet	ime	30-D	ay	Dail	l <b>y</b>
	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000
Drank Alcohol Regularly d						
6th Grade	_	2.5	_	_	_	1
8th Grade	_	12.3	_	_	_	1
10th Grade	_	25.7	_		_	
12th Grade	_	39.9	_	_	_	1
USE OF ANY TOBACCO						
6th Grade	_	12.7	_	4.0	_	0.4
8th Grade	_	37.2	_	12.5	_	2.3
10th Grade	_	50.5	_	17.1	_	6.2
12th Grade	_	60.0	_	23.4		12.1
Cigarettes						
6th Grade	_	12.2	_	3.8	_	0.4
8th Grade	40.5	36.3	14.6	12.1	7.4	2.2
10th Grade	55.1	49.5	23.9	16.6	14.0	6.1
12th Grade	62.5	58.8	31.4	22.6	20.6	11.8
Regularly Smoke Cigarettes <sup>e</sup>						
6th Grade	_	2.1	_	_	_	
8th Grade	_	11.8	_	_	_	
10th Grade	_	19.3	_	_	_	
12th Grade	_	25.6	_		_	
½ Pack +/day f						
6th Grade	_		_	_	_	0.4
8th Grade	_	_	_	_	2.8	1.9
10th Grade					6.2	3.1
12th Grade					11.3	5.9
Smokeless Tobacco						
6th Grade	_	1.2	_	0.5		0.1
8th Grade	12.8	3.6	4.2	1.5	0.9	0.3
10th Grade	19.1	5.3	6.1	1.4	1.9	0.3
12th Grade	23.1	10.0	7.6	2.0	3.2	0.4

Approximate Ns for Hawaii 2000 Study: 6th grade = 9,375; 8th grade = 7,249; 10th grade = 5,130; 12th grade = 4,106.

<u>Notes</u>: '—' indicates data not available. Nationwide indicates 2000 Monitoring the Future Study. <u>Lifetime</u> use is defined as use at least once in a student's lifetime. <u>30-Day</u> use is defined as use at least once in the past thirty days. <u>Daily</u> use is defined as use on 20 or more occasions in the past 30 days.

- <sup>c</sup> Students were asked if they tried beer or wine "more than a few sips."
- Drank Alcohol Regularly is defined as drinking at least once or twice a month.
- <sup>e</sup> Students were asked if they have *ever* smoked cigarettes on a regular basis. Students in this category may not be regular smokers anymore.
- Students were asked how frequently they smoked cigarettes in the past 30 days. ½ pack +/day includes students answering about ½ pack per day, about one pack per day, or more than one pack per day.

<sup>&</sup>lt;sup>a</sup> <u>Any Illicit Drug, Including Inhalants</u> includes marijuana, cocaine, inhalants, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, or steroids.

<sup>&</sup>lt;sup>b</sup> Any Illicit Drug, Excluding Inhalants includes marijuana, cocaine, methamphetamine, heroin, tranquilizers, ecstasy, hallucinogens, and steroids.

### APPENDIX B TREATMENT NEEDS TABLES

Table 5: Hawaii Statewide Treatment Needs Based on the DSM-III-R Criteria for Sixth, Eighth, Tenth, and Twelfth Graders, 2000.

The table first presents alcohol treatment needs for 6th, 8th, 10th, and 12th graders by listing the percentages of students who fit either an alcohol dependence (most severe diagnosis and includes both physiological symptoms, such as tolerance and withdrawal, and behavioral symptoms, such as impaired control over the use of a substance) or abuse diagnosis (a residual category for those who don't meet the criteria of dependence but who use substances in dangerous situations or who use substances despite having physical, social, psychological, or occupational problems related to their substance use) according to DSM-III-R criteria, followed by the percentages of students for each of these categories. Adolescents who meet either a dependence or an abuse diagnosis are considered needing substance abuse treatment. The percentages of students in grades 6, 8, 10, and 12 fitting either a drug dependence or abuse diagnosis, for any illicit drug, are presented next. The percentages of students in grades 6, 8, 10, and 12 fitting drug abuse and dependence diagnoses for each drug classification are also presented. Next a summary of treatment needs is presented, which includes the percentage of students at each grade-level who need treatment for alcohol use only, drug use only, both alcohol and drug use, and total treatment needs (alcohol and/or drug use).

Table 6: Summary of Hawaii Statewide Treatment Needs for Students in Grades 6 through 12, by County, District, and School Type: Estimated Number of Students Needing Treatment for Alcohol and Drug Abuse, 2000.

The table summarizes county, district, and statewide treatment needs estimates for Hawaii students in grades 6 through 12. The column "Any Substance Abuse Treatment Needs" shows that at least 13% of Hawaii students in grades 6 through 12 need treatment for alcohol, drugs, or both alcohol and drugs. Estimates are slightly higher for public school students than private school students. Not all private schools participated in the study. Thus, any differences between public and private schools may reflect a sampling bias.

## TABLE 5 Hawaii Statewide Treatment Needs Based on the DSM-III-R Criteria for Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages fitting criteria for specific diagnosis)

STATEWIDE TREATMENT NEEDS	6th Grade	8th Grade	10th Grade	12th Grade
ALCOHOL TREATMENT NEEDS (abuse or dependency)	1.1	5.2	12.5	20.0
Alcohol Abuse	0.2	0.6	1.5	2.6
Alcohol Dependency	0.9	4.6	11.1	17.4
DRUG TREATMENT NEEDS (abuse or dependency of any illicit drug)	0.6	5.1	14.5	20.4
1. Marijuana Treatment Needs (abuse or dependency)	0.5	4.3	12.4	17.0
Marijuana Abuse	0.1	0.6	2.0	3.0
Marijuana Dependency	0.4	3.7	10.4	14.1
2. Stimulant Treatment Needs (abuse or dependency)	0.2	0.9	2.2	3.0
Stimulant Abuse	0.1	0.1	0.4	0.5
Stimulant Dependency	0.1	0.9	1.8	2.5
3. Depressant Treatment Needs (abuse or dependency)	0.2	0.8	1.0	1.0
Depressant Abuse	0.1	0.1	0.2	0.3
Depressant Dependency	0.1	0.7	0.8	0.7
4. Hallucinogen Treatment Needs (abuse or dependency)	0.2	0.9	1.7	1.8
Hallucinogen Abuse	0.1	0.1	0.3	0.5
Hallucinogen Dependency	0.1	0.8	1.4	1.3
SUMMARY OF TREATMENT NEEDS				
Alcohol Treatment Needs Only	0.8	2.5	4.2	7.7
Drug Treatment Needs Only	0.3	2.0	4.8	5.0
Both Alcohol and Drug Treatment Needs	0.4	3.1	9.4	14.3
Total Treatment Needs (Alcohol and/or Drug)	1.5	7.6	18.4	27.0
Number of Students Completing Survey	9,375	7,249	5,130	4,106
Total Student Population	16,420	15,437	15,780	13,358
(a) Estimated # of Students Needing Alcohol Abuse Treatment	181	803	1,973	2,672
(b) Estimated # of Students Needing Drug Abuse Treatment	99	787	2,288	2,725
(c) Estimated # of Students Needing Any Substance Abuse Treatment	246	1,173	2,904	3,607

Notes: Two types of diagnoses are distinguished by the DSM-III-R criteria: dependence and abuse. <u>Dependence</u> is the most sever diagnosis and includes both physiological symptoms, such as tolerance and withdrawal, and behavioral symptoms, such as impaired control over the use of a substance. <u>Abuse</u> is a residual category for those who don't meet the criteria of dependence but who use substances in dangerous situations or who use substances despite having physical, social, psychological, or occupational problems related to their substance use. Because of the high likelihood of substance abuse by adolescents turning into a dependency problem, students are considered needing treatment, or at least screening for treatment, if they are diagnosed as dependent on or abusers of any of the five substances above.

TABLE 6
Summary of Statewide Treatment Needs for Students in Grades 6 through 12, by County, District, and School Type:
Estimated Number and Percentage of Students Needing Treatment for Alcohol and Drug Abuse, 2000

COUNTY/DISTRIC INFORMATION	COUNTY/DISTRICT INFORMATION		Alcohol Abuse Only Treatment Needs		Drug Abuse Only Treatment Needs		Both Alcohol and Drug Abuse Treatment Needs		ANY SUBSTANCE ABUSE TREATMENT NEEDS		Any Alcohol Abuse Treatment Needs		Any Drug Abuse Treatment Needs	
	Total N	%	n	%	n	%	n	%	n	%	n	%	n	
City & County of Honolulu	57,075	3.2	1,831	2.9	1,655	5.7	3,242	11.7	6,701	8.1	4,641	8.8	5,021	
♦ Honolulu District	16,300	3.1	499	2.3	371	4.5	739	9.9	1,606	7.2	1,178	7.0	1,137	
♦ Central District	15,452	3.2	491	2.4	377	5.5	853	11.1	1,716	7.9	1,215	8.2	1,268	
<b>♦ Leeward District</b>	16,711	3.0	493	3.3	551	4.7	791	10.9	1,823	6.9	1,159	8.1	1,354	
♦ Windward District	8,612	4.0	348	4.1	356	10.0	859	18.1	1,556	12.6	1,089	14.7	1,262	
Hawaii County/District	13,799	5.5	758	3.5	481	11.4	1,575	20.3	2,808	15.3	2,114	15.7	2,160	
Kauai County/District	5,089	4.5	230	3.7	189	8.1	413	16.3	832	11.7	593	12.5	635	
Maui County/District	10,836	3.6	395	4.9	535	8.1	876	16.6	1,804	10.6	1,144	13.5	1,461	
All Public Schools	86,799	3.7	3,214	3.3	2,860	7.0	6,106	14.0	12,145	9.8	8,492	10.7	9,277	
Private Schools	18,812	3.5	665	2.0	379	5.3	988	10.8	2,030	8.2	1,538	7.5	1,417	
TOTAL STATEWIDE	105,611	3.7	3,879	3.1	3,239	6.7	7,094	13.4	14,175	9.5	10,030	10.1	10,694	

Notes: A substance abuse/dependency diagnosis is calculated based on the student's response to items that correspond with the DSM-III-R criteria which assess a variety of negative consequences related to substance use. Students responded to abuse and dependency questions for each of the following substances: alcohol, marijuana, stimulants (cocaine, methamphetamine, speed), depressants or downers (sedatives, heroin), and hallucinogens. <u>Substance abuse</u> is indicated by at least one of the following: (1) continued use of the substance despite knowledge of having a persistent or recurrent problem(s) at school, home, work or with friends because of the substance (e.g., lower grades, fight with parents/friends, get in trouble at work, have problems concentrating, or physical problems), or (2) substance use in situations in which use is physically hazardous (e.g., drinking or using drugs when involved in activities that could have increased the students chance of getting hurt – for instance, using a knife, climbing, swimming, or driving a vehicle). For the student to be classified as abusing a substance, at least one of the two abuse symptoms must have occurred more than once in a single month or several times within the last year. In addition, the student must *not* meet the criteria for dependency on that substance. Substance dependency is the most severe diagnosis. <u>Substance dependency</u> is indicated by the student's response to nine different diagnostic criteria for dependency (e.g., marked tolerance, withdrawal symptoms, use of substances to relieve/avoid withdrawal symptoms, persistent desire or effort to stop use, using more than intended, neglect of activities, great deal of time spent using obtaining the substance, inability to fulfill roles, drinking or using substances despite having problems). A student is considered dependent on the substance if he/she marked "yes" to at least three DSM-III-R symptoms and for at least two of the symptoms, he/she indicated that it occurred several times. The abuse estimat

### APPENDIX C FACTORS RELATED TO USE TABLES

Table 7: Age of Onset for Various Illicit Drugs and Alcohol and Tobacco: A Comparison of Responses from Hawaii Sixth, Eighth, Tenth, and Twelfth Graders, 2000.

Students were asked to provide retrospective reports regarding what age, if ever, they first used various substances. Tables 7a and 7b address age of onset by indicating the percentage of students who have used various substances by certain ages

Table 8: Perceived <u>Harmfulness</u> of Various Substances as Perceived by Sixth, Eighth, Tenth, and Twelfth Graders in Hawaii versus Nationwide, 2000.

Students were asked in indicate how much they think people risk harming themselves if they engage in various substance use activities. Table 8 lists the percentage of students in Hawaii versus Nationwide that associate "a lot of risk" with various substances.

Table 9. Perceived <u>Availability</u> of Various Substances as Perceived by Sixth, Eighth, Tenth, and Twelfth Graders in Hawaii versus Nationwide, 2000.

A set of questions asked students to indicate how difficult they thought it would be for them to get various substances, if they wanted some. Table 9 compares the percentage of student in Hawaii to those Nationwide that indicated that obtaining substances is "fairly easy" or "very easy."

Table 10. Trends in <u>Frequent Exposure</u> to People Who Use Tobacco, Alcohol, and Other Drugs as Reported by Hawaii Sixth, Eighth, Tenth, and Twelfth Graders, 1996-2000.

Students were asked how frequently they are exposed to tobacco, alcohol, and other drugs by various people in their environment. Table 10 lists the percentage of students indicating frequent exposure (once a week or more) to people who use various substances.

Table 11. Trends in <u>Friends' Disapproval of Substance Use</u> as Reported by Hawaii Sixth, Eighth, Tenth, and Twelfth Graders, 1996-2000.

Students were asked how they think their closest friends feel, or would feel, if they participated in various substance use behaviors. Table 11 lists the percentage of students indicating that their friends would disapprove of them using various substances.

- Table 12. Annual Prevalence of <u>Antisocial Behaviors (ASBs)</u>, as Reported by Sixth, Eighth, Tenth, and Twelfth Graders, 2000
- Table 13. Annual Prevalence of <u>Best Friends Displaying Antisocial Behaviors (ASBs)</u>, as Reported by Sixth, Eighth, Tenth, and Twelfth Graders, 2000

Annual prevalence of antisocial behaviors (ASBs) corresponds to the percentage of students who have engaged in a specific ASB at least once in the past 12 months. Table 12 lists the percentage of students who reported engaging in specific ASBs at least once in the past year and Table 13 lists the percentage of students who reported that at least one of the four best friends had engaged in specific ASBs at least once in the past year.

# TABLE 7A <u>Age of Onset for Various Illicit Drugs</u>: A Comparison of Responses from Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages %)

	Percent who used by the time they were 9 years old												
Grade level of respondents	Marijuana	Cocaine	Inhalants	Methamphetamine	Heroin or other Opiates	Sedatives or Tranquilizers	Ecstasy	Hallucinogens	Steroids	Diuretics or Laxatives			
6th Grade	0.6	0.2	2.1	0.2	0.1	0.2	0.0	0.2	0.4	0.4			
8th Grade	1.2	0.4	2.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3			
10th Grade	1.6	0.1	1.3	0.1	0.1	0.1	0.1	0.4	0.1	0.1			
12th Grade	1.0	0.3	0.6	0.1	0.2	0.2	0.1	0.2	0.2	0.2			

	Percent who used by the time they were 10 years old											
6th Grade	1.3	0.3	3.4	0.3	0.1	0.3	0.1	0.3	0.7	0.7		
8th Grade	2.3	0.6	3.7	0.5	0.3	0.5	0.4	0.6	0.5	0.6		
10th Grade	2.8	0.3	1.9	0.3	0.1	0.2	0.2	0.5	0.1	0.3		
12th Grade	1.8	0.3	0.8	0.2	0.3	0.3	0.2	0.2	0.2	0.3		

	Percent who used by the time they were 11 years old											
6th Grade	2.0	0.4	4.9	0.4	0.1	0.4	0.1	0.4	1.1	1.1		
8th Grade	4.2	0.9	5.0	0.8	0.4	0.7	0.5	0.8	0.8	0.9		
10th Grade	4.6	0.5	2.5	0.5	0.2	0.4	0.3	0.7	0.2	0.4		
12th Grade	3.2	0.4	1.1	0.4	0.3	0.4	0.2	0.2	0.2	0.4		

	Percent who used by the time they were 12 years old										
6th Grade	2.4	0.4	5.3	0.5	0.2	0.4	0.1	0.4	1.3	1.2	
8th Grade	8.6	1.4	7.1	1.2	0.7	1.1	0.9	1.6	1.2	1.7	
10th Grade	8.4	0.8	3.6	0.8	0.4	0.8	0.6	1.1	0.3	0.9	
12th Grade	7.5	0.9	1.7	0.8	0.4	0.7	0.3	0.6	0.3	0.6	

# TABLE 7A (continued) <u>Age of Onset for Various Illicit Drugs</u>: A Comparison of Responses from Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages %)

	Percent who used by the time they were 13 years old													
Grade level of respondents	spondents Marijuana Cocaine Inhalants Methamphetamine Opiates Tranquilizers Ecstasy Hallucinogens Steroids Laxatives													
8th Grade	14.8	2.0	9.4	2.0	1.0	1.7	1.7	2.7	1.9	2.8				
10th Grade	16.1	1.3	4.9	1.5	0.6	1.2	0.9	2.0	0.5	1.5				
12th Grade	14.5	1.3	2.8	1.3	0.6	0.9	0.6	1.3	0.3	0.7				

	Percent who used by the time they were 14 years old										
8th Grade	15.9	2.2	9.9	2.3	1.2	1.8	2.0	2.9	2.2	3.2	
10th Grade	24.6	2.4	6.0	2.7	0.9	2.0	2.2	3.9	0.7	2.6	
12th Grade	23.2	1.9	3.7	2.2	0.7	1.2	0.9	2.9	0.4	1.2	

Percent who used by the time they were 15 years old										
<b>10th Grade</b> 32.1 3.3 6.8 4.2 1.2 2.9 4.5 5.9 1.4 3.9										
12th Grade	33.2	3.0	4.4	3.2	0.9	1.9	1.5	5.5	0.6	2.1

Percent who used by the time they were 16 years old												
10th Grade	<b>10th Grade</b> 33.2 3.5 7.0 4.5 1.3 3.2 5.3 6.4 1.7 4.1											
12th Grade	40.6	4.2	5.0	4.6	1.4	2.8	3.6	7.8	1.1	3.9		

Percent who used by the time they were 17 or 18 years old											
12th Grade	45.8	5.8	5.7	5.8	1.8	3.8	8.4	9.9	1.8	5.3	

TABLE 7B

<u>Age of Onset for Alcohol and Tobacco</u>

A Comparison of Responses from Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages %)

	Percent who used by the time they were 9 years old											
Grade level of respondents	ALCOHOL: Any Use	Beer or Wine	Hard Liquor	Been Drunk	TOBACCO: Any Use	Smoke first Cigarette	Regularly Smoke Cigarettes	Smokeless Tobacco				
6th Grade	11.5	11.1	1.5	1.0	6.5	6.1	0.8	0.6				
8th Grade	14.0	13.4	3.1	1.4	10.3	9.9	1.0	0.7				
10th Grade	13.4	13.0	3.4	1.3	9.7	9.2	0.7	0.8				
12th Grade	10.3	10.0	3.0	0.9	8.3	8.0	0.4	0.5				

	Percent who used by the time they were 10 years old										
6th Grade	17.4	16.7	2.8	1.6	10.3	9.9	1.4	0.9			
8th Grade	19.7	19.0	5.4	2.5	16.3	15.6	2.3	1.4			
10th Grade	17.9	17.4	5.3	2.3	15.1	14.6	1.6	1.2			
12th Grade	13.9	13.5	4.5	1.8	12.5	12.1	0.9	0.9			

		Perce	ent who used l	y the time th	ey were 11 yea	ars old		
6th Grade	22.8	22.1	4.6	2.5	12.2	11.8	2.0	1.1
8th Grade	25.6	24.6	8.3	4.2	23.3	22.7	4.1	1.7
10th Grade	21.6	20.9	7.3	3.3	20.6	20.0	2.7	1.5
12th Grade	17.0	16.6	6.3	2.4	17.5	17.0	1.6	1.3

	Percent who used by the time they were 12 years old										
6th Grade	24.2	23.3	5.1	2.9	12.7	12.2	2.1	1.2			
8th Grade	35.8	34.3	15.1	8.4	31.5	30.5	8.0	2.5			
10th Grade	28.7	27.9	12.8	6.2	29.0	28.4	5.3	2.0			
12th Grade	24.4	23.6	11.5	5.1	26.4	25.8	3.7	2.1			

# TABLE 7B (continued) <u>Age of Onset for Alcohol and Tobacco</u>: A Comparison of Responses from Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages %)

	Percent who used by the time they were 13 years old											
Grade level of respondents	ALCOHOL: Any Use	Beer or Wine	Hard Liquor	Been Drunk	TOBACCO: Any Use	Smoke first Cigarette	Regularly Smoke Cigarettes	Smokeless Tobacco				
8th Grade	47.2	45.4	24.0	15.8	36.4	35.5	11.1	3.4				
10th Grade	39.3	37.9	22.5	12.4	38.3	37.5	10.1	2.9				
12th Grade	33.2	32.2	18.8	10.0	37.1	36.6	8.1	3.1				

	Percent who used by the time they were 14 years old										
8th Grade	49.2	47.2	25.5	17.3	37.2	36.3	11.8	3.6			
10th Grade	53.2	51.0	36.3	23.5	46.0	45.2	14.8	4.0			
12th Grade	44.4	43.1	30.0	18.9	44.7	44.1	12.7	4.6			

	Percent who used by the time they were 15 years old												
<b>10th Grade</b> 64.9 62.6 49.4 35.8 49.9 48.9 18.8													
12th Grade	58.1	56.6	44.2	31.3	51.6	50.7	17.1	6.4					

	Percent who used by the time they were 16 years old													
10th Grade	67.1	64.5	51.0	37.5	50.5	49.5	19.3	5.3						
12th Grade	67.6	67.2	56.9	43.2	57.0	56.0	21.4	8.4						

Percent who used by the time they were 17 or 18 years old												
12th Grade	77.2	74.9	66.3	53.0	60.0	58.8	25.6	10.0				

TABLE 8
Perceived <u>Harmfulness</u> of Various Substances as Perceived by
Sixth, Eighth, Tenth, and Twelfth Graders in Hawaii versus Nationwide, 2000

Percentage saying "a lot of risk" a

	6th Grade b	8th Gr	ade	10th G	rade	12th G	rade
Q: How much do you think people risk harming themselves (physically or in other ways) if they:	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000
Use marijuana (hash, pakalolo, pot, weed) once or twice	51.1	29.0	52.5	18.5	41.8	13.7	35.7
Use marijuana occasionally	55.5	47.4	60.5	32.4	55.0	23.4	50.4
Use marijuana regularly	61.8	74.8	69.7	64.7	75.4	58.3	74.9
Use inhalants (glue, paint, sprays) once or twice	49.0	41.2	58.5	46.6	65.5	_	73.1
Use cocaine (powder, crack, coke, freebase) once or twice	54.9	43.3	64.3	48.8	74.0	51.1	80.2
Use cocaine occasionally	58.4	65.5	69.3	70.9	80.6	69.5	86.8
Use methamphetamine (crystal meth, speed, ice, batu, crank) once or twice	53.9	_	65.4	_	75.1	51.3	81.2
Use heroin/opiates occasionally	56.3	78.6	69.7	85.2	80.9	74.6	87.7
Use hallucinogens (LSD/PCP, mushrooms, acid) occasionally	55.2	_	68.6	_	77.4	_	82.8
Have one or two drinks of alcohol nearly every day	44.0	30.4	50.8	32.3	56.4	21.7	57.8
Have five or more drinks once or twice each weekend	52.6	55.9	57.7	51.0	58.5	42.7	56.7
Smoke one or more packs of cigarettes per day	57.4	58.8	67.1	65.9	79.1	73.1	83.2

Notes: '—' indicates data not available. Nationwide refers to results from the 2000 Monitoring the Future Study.

<sup>&</sup>lt;sup>a</sup> Answer alternatives were (1) No risk, (2) Some risk, (3) A lot of risk, (4) I don't know.

<sup>&</sup>lt;sup>b</sup> 6th graders are not surveyed in the *Monitoring the Future Study*.

**TABLE 9** Perceived Availability of Illicit Drugs, Alcohol, and Tobacco as Perceived by Sixth, Eighth, Tenth, and Twelfth Graders in Hawaii versus Nationwide, 2000

Percentage saying "fairly easy" or "very easy" to get a

	6th Grade b	8th Gra	ıde	10th Gr	ade	12th Gr	ade
Q: How difficult do you think it would be for you to get each of the following if you wanted some?	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000	Nationwide 2000	Hawaii 2000
Marijuana (hash, pakalolo, pot, weed)	6.0	47.0	26.8	77.7	57.3	88.5	71.0
Cocaine (powder, crack, freebase, coke) <sup>c</sup>	4.2	24.9	11.5	34.5	21.7	47.8	28.8
Methamphetamine (crystal meth, ice, speed, batu, crank)	3.8	14.9	10.6	22.8	20.5	27.8	28.8
Ecstasy/MDMA	3.6	_	10.4	_	25.9	51.4	39.0
Heroin, methadone, other opiates	3.7	16.5	9.5	22.3	16.4	33.5	20.3
Sedatives (barbiturates, downers/reds, quaaludes, sleeping pills) <sup>d</sup>	5.6	19.7	14.2	32.4	27.8	37.4	33.7
Tranquilizers (valium)	3.9	16.2	10.2	27.6	18.2	33.8	22.0
Hallucinogens (LSD/PCP, mushrooms, acid) <sup>e</sup>	4.3	17.0	11.6	32.9	24.0	46.9	32.5
Steroids	5.0	22.3	12.2	35.4	22.2	44.8	28.6
Any alcohol access	17.4	70.6	47.6	87.7	73.8	94.8	83.7
Alcohol (beer/wine)	16.8	_	46.7	_	72.8	_	83.2
Alcohol (liquor)	9.1	_	34.4	_	62.9	_	77.4
Cigarettes	14.3	68.7	42.6	86.8	69.8	_	86.0
Snuff or chewing tobacco	6.8	_	20.8	_	42.9	_	67.1

Notes: '—' indicates data not available. Nationwide refers to results from the 2000 Monitoring the Future Study.

<sup>&</sup>lt;sup>a</sup> Answer alternatives were: (1) *Very difficult*, (2) *Fairly difficult*, (3) *Fairly easy*, (4) *Very easy*. 
<sup>b</sup> *Monitoring the Future* does not survey 6th graders.

<sup>&</sup>lt;sup>c</sup> Monitoring the Future survey measured Crack and Cocaine Powder separately. The number reported in the table is the higher of the two.

<sup>&</sup>lt;sup>d</sup> *Monitoring the Future* survey measured Barbiturates rather than all sedatives.

<sup>&</sup>lt;sup>e</sup> Monitoring the Future survey measured LSD and PCP separately. The number reported in the table is the higher of the two.

### TABLE 10 Trends in Frequent Exposure to People Who Use Tobacco, Alcohol, and Other Drugs As Reported by Sixth, Eighth, Tenth, and Twelfth Graders, 1996-2000

Percentage saying "once a week" or "every day" a

		6th	Grade	;		8th	Grade	;		10th	Grad	e		12th	Grad	e
Q: During the last 12 months, how often have you been around the following people when they were using:	1996	1998	2000	'98-'00 change	1996	1998	2000	'98-'00 change	1996	1998	2000	'98-'00 change	1996	1998	2000	'98-'00 change
Tobacco:																
Parents <sup>b</sup>	_	15.0	16.1	+1.1	_	22.5	21.4	-1.1	_	25.4	24.9	-0.5	_	26.4	25.7	-0.7
Brothers or Sisters b	_	3.2	2.7	-0.5	_	6.9	6.7	-0.2	_	10.4	8.7	-1.7	_	11.8	11.0	-0.8
Other Relatives	11.9	11.2	10.4	-0.8	15.2	15.7	16.5	+0.8	19.8	17.9	18.3	+0.4	18.4	16.8	18.8	+2.0
Your 10 Closest Friends <sup>c</sup>	6.2	2.4	1.5	-0.9	19.7	13.3	8.6	-4.7	35.0	27.2	20.3	-6.9	43.1	37.6	34.1	-3.5
Other People	14.4	15.9	7.3	-8.6	22.1	28.6	14.3	-14.3	35.6	43.5	28.0	-15.5	37.5	47.4	34.9	-12.5
Alcohol:																
Parents	_	17.5	13.0	-4.5	_	24.4	19.7	-4.7	_	25.6	23.7	-1.9	_	25.8	24.5	-1.3
Brothers or Sisters	_	2.1	1.4	-0.7	_	4.1	4.1	0.0	_	6.5	4.9	-1.6	_	6.8	7.3	+0.5
Other Relatives	14.0	12.3	7.5	-4.8	15.3	15.1	12.1	-3.0	16.3	14.8	14.1	-0.7	14.9	12.8	13.2	+0.4
Your 10 Closest Friends	4.5	1.6	0.9	-0.7	10.8	7.3	5.5	-1.8	18.9	15.0	12.4	-2.6	27.1	24.2	23.4	-0.8
Other People	13.2	12.9	4.7	-8.2	16.3	16.5	8.3	-8.2	16.3	19.4	12.2	-7.2	18.7	21.9	16.4	-5.5
Illicit Drugs:																
Parents	_	1.4	3.8	+2.4	_	2.4	3.3	+0.9	_	3.1	3.5	+0.4	_	2.2	3.3	+1.1
Brothers or Sisters		1.0	1.0	0.0	_	2.7	2.3	-0.4	_	3.5	3.1	-0.4	_	2.7	3.6	+0.9
Other Relatives	2.5	1.8	2.6	+0.8	5.1	3.3	3.5	+0.2	3.4	3.7	4.6	+0.9	3.4	2.8	3.6	+0.8
Your 10 Closest Friends	2.5	1.1	0.9	-0.2	3.7	6.7	4.7	-2.0	16.2	14.9	11.5	-3.4	21.5	16.4	16.9	+0.5
Other People	4.3	3.3	2.4	-0.9	2.5	6.1	4.9	-1.2	12.0	12.1	9.4	-2.7	13.6	11.3	11.7	+0.4
Frequent exposure to at least one person who uses <b>tobacco</b>	31.8	30.6	25.4	-5.2	42.7	45.3	37.3	-8.0	58.5	60.6	50.5	-10.1	60.8	66.7	59.4	-7.3
Frequent exposure to at least one person who uses <b>alcohol</b>	37.1	29.7	18.3	-11.4	43.2	37.9	27.7	-10.2	50.9	43.8	38.4	-5.4	53.0	48.2	45.0	-3.2
Frequent exposure to at least one person who uses illegal <b>drugs</b>	7.8	5.5	7.0	+1.5	15.1	12.0	9.9	-2.1	20.6	20.7	17.0	-3.7	25.1	21.7	22.0	+0.3

Note: '—' indicates data not available.

a Answer alternatives were (1) Not at all, (2) A few times a year, (3) Once or twice a month, (4) At least once a week, (5) Almost every day.

b In 1996, students reported on exposure to family members. In 1998 and 2000, students reported on exposure to parents and to brothers or sisters. Thus, the 1996 data regarding family members is not comparable to the 1998 data regarding parents and brothers or sisters.

c In 1996, students were asked to report on their friends rather than on their 10 closest friends.

## TABLE 11 Trends in <u>Friends' Disapproval of Substance Use</u> As Reported by Hawaii Sixth, Eighth, Tenth, and Twelfth Graders, 1996-2000

(Entries are percentages %)

Q: How do you think your close friends feel (or would feel) about you:	1996	1998	2000	'98-'00 change
Smoking one or more packs of cigarettes a day				
6th Grade	80.2	80.6	85.4	+4.8
8th Grade	71.2	71.9	75.6	+3.7
10th Grade	70.9	69.9	76.6	+6.7
12th Grade	69.6	67.1	74.9	+7.8
Using snuff or chewing tobacco				
6th Grade	84.2	84.3	86.8	+2.5
8th Grade	78.5	77.9	79.0	+1.1
10th Grade	79.4	77.2	81.6	+4.4
12th Grade	77.6	73.8	79.3	+5.5
Have five or more alcoholic drinks once or twice every weekend				
6th Grade	81.8	82.4	86.2	+3.8
8th Grade	70.2	70.9	75.3	+4.4
10th Grade	60.4	59.4	65.9	+6.5
12th Grade	56.2	51.5	56.6	+5.1
Taking one or two alcoholic drinks nearly every day				
6th Grade	83.5	84.1	86.4	+2.3
8th Grade	74.8	75.2	76.8	+1.6
10th Grade	72.3	71.2	74.7	+3.5
12th Grade	72.3	69.1	72.5	+3.4
Using marijuana occasionally				
6th Grade	85.5	85.5	86.9	+1.4
8th Grade	73.3	74.9	75.7	+0.8
10th Grade	67.2	63.0	66.6	+3.6
12th Grade	62.0	58.8	59.0	+0.2
Using marijuana regularly				
6th Grade	86.8	86.3	87.3	+1.0
8th Grade	77.2	78.1	77.8	-0.3
10th Grade	74.8	71.9	73.5	+1.6
12th Grade	73.2	71.3	70.2	-1.1
Using cocaine once or twice				
6th Grade	86.1	86.2	87.5	+1.3
8th Grade	82.5	82.4	82.2	-0.2
10th Grade	87.0	86.8	87.3	+0.5
12th Grade	86.5	88.7	89.8	+1.1
Trying inhalants				
6th Grade	82.2	82.2	86.2	+4.0
8th Grade	78.6	78.9	80.2	+1.3
10th Grade	85.4	84.1	86.2	+2.1
12th Grade	87.3	87.3	89.7	+2.4
Using methamphetamine				
6th Grade	87.9	87.1	87.3	+0.2
8th Grade	85.1	83.8	82.5	-1.3
10th Grade	89.4	88.0	87.6	-0.4
12th Grade	90.3	90.4	90.3	-0.1

<u>Notes</u>: '—' indicates data not available. Answer alternatives were (1) *Would think it was cool*, (2) *Wouldn't care*, (3) *Would disapprove*, and (4) *Would strongly disapprove*. The percentages above represent students responding that friends would disapprove or would strongly disapprove.

TABLE 12
Annual Prevalence of <u>Antisocial Behaviors (ASBs)</u>,
as Reported by Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages %)

Number of Times ASB Occurred in	1 or 2	3 to 5	6 +	At Least
Past Year or 12 Months:	Times	Times	Times	Once
Been Suspended from School				
6th Grade	3.9	0.5	0.3	4.7
8th Grade	7.9	1.1	0.9	9.9
10th Grade	6.8	0.9	0.4	8.1
12th Grade	6.0	0.7	0.2	6.9
Been Drunk or High at School				
6th Grade	1.2	0.2	0.2	1.6
8th Grade	5.1	1.7	2.6	9.4
10th Grade	7.6	3.7	6.5	17.8
12th Grade	8.5	4.0	7.4	19.9
Taken a Handgun to School				
6th Grade	0.2	0.1	0.2	0.5
8th Grade	0.7	0.2	0.6	1.5
10th Grade	0.5	0.1	0.5	1.1
12th Grade	0.2	0.1	0.3	0.6
Sold Illegal Drugs				
6th Grade	0.4	0.1	0.1	0.6
8th Grade	2.0	0.8	1.4	4.2
10th Grade	3.3	1.4	2.5	7.2
12th Grade	4.2	1.4	3.1	8.7
Stolen or Tried to Steal a Vehicle				
6th Grade	0.5	0.1	0.2	0.8
8th Grade	1.4	0.6	0.7	2.7
10th Grade	2.3	0.5	0.5	3.3
12th Grade	1.7	0.2	0.2	2.1
Attacked Someone with the Idea Of Seriously Hurting Them				
6th Grade	3.8	0.5	0.7	5.0
8th Grade	5.7	1.2	1.7	8.6
10th Grade	5.3	1.1	1.4	7.8
12th Grade	4.6	1.2	0.9	6.7
Carried a Handgun				
6th Grade	1.0	0.3	0.3	1.6
8th Grade	1.9	0.4	1.0	3.3
10th Grade	1.4	0.4	0.7	2.5
12th Grade	1.0	0.3	0.5	1.8
Been Arrested				
6th Grade	1.0	0.2	0.2	1.4
8th Grade	3.6	0.8	0.8	5.2
10th Grade	4.3	0.7	0.5	5.5
12th Grade	4.1	0.5	0.3	4.9

NOTES: <u>Annual Prevalence</u> refers to occurrence in past 12 months. Students were asked how many times they have engaged in each antisocial behavior, listed in the table, during the past year or 12 months. Answer alternatives were (1) never, (2) 1 or 2 times, (3) 3 to 5 times, (4) 6 to 9 times, (5) 10 to 19 times, (6) 20 to 29 times, and (7) 30+ times.

TABLE 13
Annual Prevalence of <u>Best Friends Displaying Antisocial Behaviors (ASBs)</u>
as Reported by Sixth, Eighth, Tenth, and Twelfth Graders, 2000

(Entries are percentages %)

Percentage Saying Specific Number of Friends

Number of Best Friends Displaying		ercentage Sayn	bpecific rva		At Least
ASB in Past Year or 12 Months:	1 Friend	2 Friends	3 Friends	4 Friends	One Friend
Been Suspended from School					
6th Grade	13.7	5.2	1.8	2.9	23.6
8th Grade	18.5	10.1	4.9	8.2	41.7
10th Grade	17.7	10.6	5.3	7.4	41.1
12th Grade	15.0	10.0	4.5	5.9	35.0
Taken a Handgun to School					
6th Grade	1.4	0.3	0.1	0.3	2.1
8th Grade	3.1	0.8	0.3	1.2	5.4
10th Grade	3.7	1.2	0.4	0.7	5.9
12th Grade	2.7	0.9	0.3	0.6	4.4
Sold Illegal Drugs					
6th Grade	1.6	0.6	0.2	0.4	2.9
8th Grade	7.9	3.9	2.0	4.4	18.2
10th Grade	11.9	8.1	4.7	9.4	34.1
12th Grade	11.4	8.8	5.2	10.9	36.2
Stolen or Tried to Steal a Vehicle					
6th Grade	2.1	0.5	0.2	0.4	3.2
8th Grade	5.3	2.4	1.1	2.3	11.0
10th Grade	8.8	3.5	1.9	2.2	16.5
12th Grade	6.7	3.7	1.0	1.6	13.0
Been Arrested					
6th Grade	5.2	1.6	0.5	0.7	8.0
8th Grade	12.1	5.9	2.4	4.5	25.0
10th Grade	14.6	6.9	4.2	5.3	31.1
12th Grade	12.3	7.1	3.3	4.3	27.0
Dropped Out of School					
6th Grade	4.6	1.0	0.4	0.6	6.6
8th Grade	7.4	2.3	1.3	2.5	13.5
10th Grade	13.3	5.2	2.2	2.9	23.7
12th Grade	16.2	6.3	2.5	2.9	27.9
Been Members of a Gang					
6th Grade	5.1	1.7	0.9	2.4	10.0
8th Grade	7.4	3.6	2.1	7.5	20.6
10th Grade	6.4	3.7	2.1	7.3	17.8
12th Grade	4.5	2.9	1.3	6.5	15.2

NOTES: <u>Annual Prevalence</u> refers to occurrence in past 12 months. Students were asked how many of their four best friends have engaged in each antisocial behavior, listed in the table, during the past year or 12 months. Answer alternatives were (1) none, (2) 1 friend, (3) 2 friends, (4) 3 friends, and (5) 4 friends.

### APPENDIX D RISK AND PROTECTIVE FACTORS TABLES

#### Table 13: Risk and Protective Factor Definitions

Table 13 lists and defines the 28 risk factors and the 11 protective factors that are used in the study to create community prevention profiles. Risk factors are characteristics of school, community, and family environments, as well as characteristics of students and their peer groups, that are known to predict increased likelihood of drug use, delinquency, and violent behaviors among youths (Brewer, Hawkins, Catalano, & Neckerman, 1995; Hawkins, Arthur, & Catalano, 1995; Hawkins, Catalano, & Miller, 1992; Lipsey & Derzon, 1998). Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. Protective factors identified through research reviewed by Drs. Hawkins and Catalano include social bonding to family, school, community and peers; healthy beliefs and clear standards for behavior; and individual characteristics. For bonding to serve as a protective influence, it must occur through involvement with peers and adults who communicate healthy values and set clear standards for behavior. Research on risk and protective factors has important implications for prevention efforts. The premise of this approach is that, in order to promote positive youth development and prevent problem behaviors, it is necessary to address those factors that predict the problem behaviors. By measuring risk and protective factors in a population, prevention programs can be implemented that will reduce elevated risk factors and increase protective factors.

Table 14: Correlations Between Risk/Protective Factors and Substance Use and Antisocial Behaviors (ASBs) Prevalence, 2000

The predictive utility of risk and protective factor indexes and individual risk and protective factors were examined by correlating each index and factor with the occurrence of substance use and antisocial behaviors (ASBS). One important caveat should be made regarding the utility of statistical correlations based on variables that are measured at the same point in time. Some risk and protective factors may influence substance use and ASBs years down the line. Thus, the relationships between the risk or protective factors and current substance use and ASBs might be, in some instances, quite small. All of the risk and protective factors included in this study have been shown by other researchers to predict substance use and adolescent delinquency. That is, all of the factors were previously tested over time and each were determined to significantly predict future substance use. Correlations presented in Table 14 provide further proof that each factor is statistically related to substance use.

Table 15: Hawaii County Level (Place of Residence) and District Level Comparisons of Risk and Protective Factors: Identification of Factors that Should be the Focus of Prevention Efforts. 2000

Table 15 highlights specific risk and protective factors that should be the focus of prevention efforts at the county and district level. County-level data includes both public and private schools students. District-level data includes only public school students.

Table 16: Hawaii <u>Sex</u> and <u>Ethnic</u> Comparisons of Risk and Protective Factors: Identification of Factors that Should be the Focus of Prevention Efforts, 2000

Table 16 highlights specific risk and protective factors that should be the focus of prevention efforts directed at specific subgroups.

### TABLE 13 Risk and Protective Factor Definitions

		Risk Factors							
	Low Neighborhood	Defined as a lack of connection to the community. Low levels of bonding to the neighborhood are related to							
	Attachment	higher levels of juvenile crime and drug selling.							
	Community Disorganization	Defined as the prevalence of crime, violence, and delinquency in the neighborhood. Research has shown that neighborhoods with high population density, lack of public surveillance, physical deterioration, and high rates of adult crime also have higher rates of juvenile crime and drug selling.							
	Transition & Mobility	Defined as amount of movement from one community or school to another. Neighborhoods with high rates of residential mobility have been shown to have higher rates of juvenile crime and drug selling, while children who experience frequent residential moves and stressful life transitions have been shown to have higher risk for school failure, delinquency, and drug use.							
omain	Exposure to Community ATOD Use	Defined as frequent exposure to ATOD use by people in one's neighborhood or school. Frequent exposure to ATOD use influences normative beliefs and understanding of how to engage in the behavior and, thus, increases likelihood of ATOD use.							
Community Domain	Laws & Norms Favorable to Drug Use	Defined as the attitudes and policies a community holds about drug use and crime. Research has shown that legal restrictions on alcohol and tobacco use, such as raising the legal drinking age, restricting smoking in public places, and increasing taxation have been followed by decreases in consumption. Moreover, national surveys of high school seniors have shown that shifts in normative attitudes toward drug use have preceded changes in prevalence or use.							
Comr	Perceived Availability of Drugs & Handguns	Defined as the perceived ease in obtaining drugs and firearms for adolescents. The availability of cigarettes, alcohol, marijuana, and other illegal drugs has been related to the use of these substances by adolescents. Availability of handguns is also related to a higher risk of crime by adolescents.							
	Ability to Purchase Alcohol or Tobacco  Defined as whether or not a student has been able to purchase alcohol and/or tobacco from a store employee, a bar, or a restaurant. Corresponding with perceived availability, opportunities to purchase alcohol and tobacco have been related to use of these substances by adolescents.								
		Protective Factors							
	Community Opportunities for Positive Involvement	Defined as opportunities to engage in prosocial activities in the community such as sports or adult- supervised clubs. When opportunities are available in a community for positive participation, children are less likely to engage in substance use and other problem behaviors.							
	Community Rewards for Positive Involvement	Defined as community encouragement for adolescents engaging in positive activities. Rewards for positive participation in activities help children bond to the community, thus lowering their risk for substance use.							
	•	Risk Factors							
	Poor Family Supervision	Defined as a lack of clear expectations for behavior and a failure of parents to monitor their children.  Parents' failure to provide clear expectations and to monitor their children's behavior makes it more likely that their children will engage in drug use whether or not there are family drug problems.							
	Family Conflict	Defined as the degree to which family members fight or argue. Children raised in families high in conflict, whether or not the child is directly involved in the conflict, appear at risk for both delinquency and drug use.							
	Lack of Parental Sanctions for ATOD Use	Defined as a low probability that parents will sanction their children for ATOD use. Parents' failure to clearly communicate to their children that their children would be in trouble if caught using alcohol, tobacco, or other drugs places children at higher risk for substance use.							
ain	Parental Attitudes Favorable Toward ATOD Use	Defined as parental attitudes approving of young people's ATOD use. In families where parents are tolerant of children's use, children are more likely to become drug abusers during adolescence.							
amily Domain	Exposure to Family ATOD Use	Defined as a high degree of exposure to parents' ATOD use. In families where parents use illegal drugs or are heavy users of alcohol, children are more likely to become drug abusers during adolescence. The risk is further increased if parents involve children in their own substance-using behavior – for example, asking the child to light the parent's cigarette or to get the parent a beer from the refrigerator.							
ami	Parental Attitudes Favorable Toward ASB	Defined as parental attitudes excusing children for breaking the laws. In families where parents are tolerant of antisocial behavior, children are more likely to engage in antisocial behavior.							
4	Family (Sibling) History of ASB	Defined as high ASB prevalence among brothers and sisters. When children are raised in a family with a history of problem behaviors, the children are more likely to engage in these behaviors.							
		Protective Factors							
	Family Attachment	Defined as feeling connected to and loved by one's family. Young people who feel that they are a valued part of their family are less likely to engage in substance use and other problem behaviors.							
	Family Opportunities for Positive Involvement	Defined as opportunities for positive social interaction with parents. Young people who are exposed to more opportunities to participate meaningfully in the responsibilities and activities of the family are less likely to engage in drug use and other problem behaviors.							
	Family Rewards for Positive Involvement	Defined as positive experiences with parental figures. When family members praise, encourage, and attend to their children's accomplishment, children are less likely to engage in substance use and ASB.							

### TABLE 13 (continued) Risk and Protective Factor Definitions

		Risk Factors								
<u>u</u>	Low School Commitment	Defined as the student's inability to see the role of a student as a viable one. Factors such as disliking school and perceiving the course work as irrelevant are positively related to drug use.								
omai	Poor Academic Performance	Defined as poor performance in school. Beginning in the late elementary grades (grades 4-6), academic failure increases the risk of drug abuse and delinquency.								
Ď		Protective Factors								
School Domain	School Opportunities for Positive Involvement	Defined as opportunities to become involved in school activities. When young people are given more opportunities to participate meaningfully in important activities at school, they are less likely to engage in drug use or problem behaviors.								
S	School Rewards for Positive Involvement	Defined as positive feedback by school personnel for student achievement. When young people are recognized and rewarded for their contributions at school, they are less likely to be involved in substance use and other problem behaviors.								
		Risk Factors								
	Early Initiation of Problem Behaviors	Defined as early substance use and early onset of problem behaviors. The earlier the onset of any drug use, the greater the involvement in other drug use. Onset of drug use prior to the age of 15 is a consistent predictor of drug abuse; later age of onset of drug use has been shown to predict lower drug involvement and a greater probability of discontinuation of use.								
	Favorable Attitudes Toward ATOD Use	Defined as perceptions that it is not wrong for young people to engage in ATOD use. Initiation of use of any substance is preceded by values favorable to its use. During the elementary school years, most children express anti-drug, anti-crime, and prosocial attitudes and have difficulty imagining why people use drugs. However, in middle school, as more youths are exposed to others who use drugs, their attitudes often shift toward greater acceptance of these behaviors. Youths who express positive attitudes toward drug use are at higher risk for subsequent drug use.								
	Low Perceived Risk of ATOD Use									
	Antisocial Behaviors (ASBs)	Defined as engaging in problem behaviors such as violence and delinquency.								
ain	Favorable Attitudes Toward ASB	Defined as a student's acceptance of drug use, criminal activity, violent behavior, or ignorance of rules. Young people who accept or condone antisocial behavior are more likely to engage in a variety of problem behaviors, including drug use.								
Peer-Individual Domain	Friends' ATOD Use	Defined as having several close friends who engage in ATOD use. Peer drug use has consistently been found to be among the strongest predictors of substance use among youths – even when young people come from well-managed families and do not experience other risk factors.								
idua	Interaction with Antisocial Peers	Defined as having several close friends who engage in problem behaviors. Young people who associate with peers who engage in problem behaviors are at higher risk for engaging in antisocial behavior themselves.								
ndiv	Rewards for Antisocial Involvement	Defined as having friends who approve of ATOD use and who are ignorant of laws and rules. Young people who receive rewards for their ASB are at higher risk for engaging further in ASB and ATOD use.								
eer-I	Rebelliousness	Defined as not being bound by rules and taking an active rebellious stance toward society. Young people who do not feel like part of society, are not bound by rules, do not believe in trying to be successful or responsible, or who take an active rebellious stance toward society, are at higher risk of abusing drugs.								
Ь	Sensation Seeking	Defined as having a high need for sensation or arousal experiences. Young people with a high need for arousal have increased risk for participating in ATOD use and other problem behaviors.								
	Gang Involvement	Defined as the degree of involvement in gangs or with gang members. Gang involvement often increases youth exposure to ATOD use and ASB, which puts them at greater risk for engaging in similar behaviors.								
	Depression	Defined as signs of depression or lack of self-worth. Lack of self-worth is often associated with ATOD use.								
		Protective Factors								
	Peer Disapproval of ATOD Use	Defined as student perceptions that his or her close friends would disapprove of him or her using substances. Peer pressure is a strong factor influencing adolescent behavior, and peer pressure not to use alcohol, tobacco, and other drugs is a very powerful deterrence.								
	Religiosity	Defined as perceiving oneself to be religious and enjoying religious activities. Young people who regularly attend religious services are less likely to engage in problem behaviors.								
	Belief in the Moral Order	Defined as beliefs that one is bound by societal rules. Young people who have a belief in what is "right" and "wrong" are less likely to use drugs.								
	Educational Aspirations	Defined as aspirations for continuing on to and graduating from college. National surveys of high school seniors have shown that ATOD use is significantly lower among students who expect to attend and graduate from college than among those who do not.								

TABLE 14
Correlations Between Risk/Protective Factors and Substance Use and Antisocial Behaviors (ASBs) Prevalence, 2000
(Entries are correlations)

	Alcoho	l, Tobaco	co, and C	ther Dr	ug (ATO	D) Use	Fre	equency (	of ASB (	)ccurre	nce
Risk/Protective Factors	Number of Drugs Used in Lifetime	Number of Drugs Used Past 30-Days	Monthly Cigarette Use	Monthly Alcohol Use	Monthly Marijuana Use	Substance Abuse	Drunk at School	Suspended from School	Attacked Someone	Sold Illegal Drugs	Arrested
<b>Community Domain: Risk Factors</b>											
Low Neighborhood Attachment	.13	.09	.08	.10	.07	.12	.11	.05	.09	.06	.08
Community Disorganization	.17	.14	.12	.14	.11	.16	.16	.13	.18	.14	.12
Transition & Mobility	.15	.10	.11	.10	.10	.13	.12	.09	.08	.08	.09
Exposure to Community ATOD Use	.41	.34	.37	.43	.40	.45	.41	.19	.22	.34	.23
Laws and Norms Favorable to ATOD Use	.45	.34	.34	.43	.38	.46	.41	.20	.24	.33	.22
Perceived Availability of Drugs and Handguns	.42	.31	.29	.38	.32	.41	.35	.14	.17	.28	.18
Ability to Purchase Alcohol or Tobacco	.48	.40	.44	.45	.39	.45	.40	.20	.25	.38	.28
<b>Community Domain: Protective Factors</b>											
Community Opportunities for Positive Involvement	NS	NS	NS	.04	NS	.03	NS	NS	NS	NS	NS
Community Rewards for Positive Involvement	12	08	09	10	.09	11	10	04	06	08	06
Family Domain: Risk Factors											
Poor Family Supervision	.22	.20	.18	.23	.20	.23	.20	.12	.15	.18	.14
Family Conflict	.14	.10	.11	.13	.09	.14	.12	.08	.13	.09	.08
Lack of Parental Sanctions for ATOD Use	.24	.21	.19	.23	.21	.22	.21	.13	.12	.20	.16
Parental Attitudes Favorable Toward ATOD Use	.38	.32	.32	.38	.35	.37	.34	.18	.20	.31	.22
Exposure to Family ATOD Use	.31	.25	.27	.33	.29	.34	.30	.13	.17	.24	.16
Parental Attitudes Favorable Toward ASB	.30	.26	.19	.27	.23	.27	.27	.20	.27	.25	.21
Family (Sibling) History of ASB	.33	.23	.26	.31	.26	.33	.30	.16	.18	.21	.16
Family Domain: Protective Factors											
Family Attachment	15	11	14	14	10	15	14	08	11	09	10
Family Opportunities for Prosocial Involvement	15	11	13	14	10	16	14	07	12	10	09
Family Rewards for Prosocial Involvement	19	14	17	17	13	19	17	10	13	12	12

TABLE 14 (continued)
Correlations Between Risk/Protective Factors and Substance Use and Antisocial Behaviors (ASBs) Prevalence, 2000
(Entries are correlations)

	Alcoho	l, Tobaco	o, and O	ther Dr	ug (ATO	D) Use	Frequency of ASB Occurrence					
Risk/Protective Factors	Number of Drugs Used in Lifetime	Number of Drugs Used Past 30-Days	Monthly Cigarette Use	Monthly Alcohol Use	Monthly Marijuana Use	Substance Abuse	Drunk at School	Suspended from School	Attacked Someone	Sold Illegal Drugs	Arrested	
School Domain: Risk Factors												
Low School Commitment	.29	.24	.22	.27	.23	.28	.25	.15	.19	.20	.16	
Poor Academic Performance	.17	.14	.18	.16	.15	.15	.17	.17	.13	.12	.14	
School Domain: Protective Factors												
School Opportunities for Positive Involvement	16	14	11	14	13	13	13	10	12	.12	.10	
School Rewards for Positive Involvement	19	15	13	17	.15	17	17	09	12	.12	.11	
Peer-Individual Domain: Risk Factors												
Early Initiation of Problem Behaviors	.64	.47	.44	.55	.47	.57	.50	.35	.38	.39	.35	
Favorable Attitudes Toward ATOD Use	.52	.42	.44	.50	.46	.52	.49	.22	.25	.37	.26	
Low Perceived Risk of ATOD Use	.10	.11	.07	.08	.09	.07	.08	.10	.07	.09	.08	
Antisocial Behaviors (ASBs)	.50	.49	.32	.42	.50	.45	.58	.45	.52	.66	.54	
Favorable Attitudes Toward ASB	.40	.33	.29	.38	.32	.39	.38	.23	.33	.31	.24	
Friends' ATOD Use	.50	.38	.42	.49	.43	.52	.48	.21	.23	.33	.25	
Interaction with Antisocial Peers	.47	.41	.36	.42	.43	.46	.48	.32	.33	.44	.36	
Rewards for Antisocial Involvement	.43	.34	.34	.41	.37	.43	.41	.21	.28	.32	.23	
Rebelliousness	.30	.24	.22	.29	.23	.28	.27	.20	.25	.22	.19	
Sensation Seeking	.42	.35	.30	.41	.35	.43	.39	.22	.32	.32	.24	
Gang Involvement	.32	.27	.23	.25	.22	.27	.29	.25	.31	.27	.27	
Depression	.16	.12	.14	.13	.08	.14	.13	.10	.15	.08	.10	
Peer-Individual Domain: Protective Factors												
Peer Disapproval of ATOD Use	26	23	19	22	22	23	22	16	15	18	16	
Religiosity	07	06	07	07	08	08	08	03	02	06	05	
Belief in the Moral Order	33	26	24	32	27	32	31	21	26	25	20	
Educational Aspirations	13	12	12	11	12	12	15	14	12	12	13	
Risk Index	.50	.38	.39	.49	.41	.50	.48	.30	.35	.35	.29	
Protective Index	21	17	17	19	17	20	20	12	15	14	14	

NOTES:  $\underline{ATOD}$  refers to Alcohol, Tobacco, and Other Drug Use.  $\underline{ASB}$  refers to Antisocial Behavior. All correlations in the table are significant at p<.0001. Correlations not significant at the p<.0001 are indicated by NS. .

TABLE 15
Hawaii <u>County Level</u> (Place of Residence) and <u>District Level</u> Comparisons of Risk and Protective Factors:
Identification of Factors that Should be the Focus of Prevention Efforts, 2000

	Cour	nty (Pub	y (Public & Private) Public School District								
Risk/Protective Factors	Honolulu County	Hawaii County	Kauai County	Maui County	Honolulu	Central	Leeward	Windward	Hawaii	Kauai	Maui
<b>Community Domain: Risk Factors</b>											
Low Neighborhood Attachment	/	~			/	<b>'</b>	~		~		
Community Disorganization	/				/		~				
Transition & Mobility	>	<b>✓</b>		<b>'</b>		<b>✓</b>	<b>✓</b>	<b>'</b>			
Exposure to Community ATOD Use		<b>✓</b>	<b>&gt;</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>/</b>	<b>~</b>	<b>~</b>	<b>✓</b>
Laws and Norms Favorable to ATOD Use		<b>✓</b>	<b>&gt;</b>	<b>✓</b>			<b>✓</b>	<b>/</b>	<b>~</b>	<b>~</b>	<b>✓</b>
Perceived Availability of Drugs and Handguns		<b>✓</b>	<b>&gt;</b>			<b>✓</b>		<b>/</b>	<b>~</b>	<b>~</b>	
Ability to Purchase Alcohol or Tobacco		<b>/</b>				<b>'</b>		<b>'</b>	<b>'</b>		
<b>Community Domain: Protective Factors</b>											
Community Opportunities for Positive Involvement	~				~	~	~	~			
Community Rewards for Positive Involvement	<b>&gt;</b>				<b>&gt;</b>	<b>'</b>	<b>'</b>				
Family Domain: Risk Factors											
Poor Family Supervision		<b>✓</b>	<b>&gt;</b>	<b>✓</b>	<b>&gt;</b>		<b>✓</b>		<b>~</b>	<b>~</b>	<b>/</b>
Family Conflict	~				~		~				
Lack of Parental Sanctions for ATOD Use		~	<b>&gt;</b>	~				~	~	~	~
Parental Attitudes Favorable Toward ATOD Use		~	<b>&gt;</b>	~				~	~	~	~
Exposure to Family ATOD Use		~	<b>&gt;</b>	~				~	~	~	~
Parental Attitudes Favorable Toward ASB		~	<b>&gt;</b>	~		<b>'</b>		~	~	~	
Family (Sibling) History of ASB		<b>/</b>	>	<b>/</b>				<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Family Domain: Protective Factors											
Family Attachment	>				>	<b>✓</b>	<b>/</b>				
Family Opportunities for Prosocial Involvement	<b>&gt;</b>				<b>/</b>	<b>✓</b>	<b>'</b>				
Family Rewards for Prosocial Involvement	<b>/</b>				<b>/</b>	<b>✓</b>	<b>✓</b>				

## TABLE 15 (continued) Hawaii County Level (Place of Residence) and District Level Comparisons of Risk and Protective Factors: Identification of Factors that Should be the Focus of Prevention Efforts, 2000

	Cour	nty (Pub	lic & Pri	vate)			Public	School l	District		
Risk/Protective Factors	Honolulu County	Hawaii County	Kauai County	Maui County	Honolulu	Central	Leeward	Windward	Hawaii	Kauai	Maui
School Domain: Risk Factors	Ī										
Low School Commitment		~	~	~		~		~	<b>'</b>	~	~
Poor Academic Performance	<b>V</b>				>		<b>/</b>	<b>/</b>			<b>/</b>
School Domain: Protective Factors											
School Opportunities for Positive Involvement		<b>/</b>	<b>/</b>	<b>✓</b>	<b>/</b>	<b>✓</b>		<b>'</b>	<b>✓</b>	<b>~</b>	<b>✓</b>
School Rewards for Positive Involvement				<b>/</b>	<b>/</b>	<b>/</b>	<b>'</b>		<b>'</b>	<b>'</b>	<b>/</b>
Peer-Individual Domain: Risk Factors											
Early Initiation of Problem Behaviors		~	<b>✓</b>	~			<b>✓</b>	<b>'</b>	~	<b>/</b>	~
Favorable Attitudes Toward ATOD Use		~	<b>✓</b>	~		<b>V</b>		<b>'</b>	~	<b>/</b>	~
Low Perceived Risk of ATOD Use		~	<b>/</b>	~					~	<b>/</b>	~
Antisocial Behaviors (ASBs)		~	<b>/</b>	~		<b>V</b>	<b>~</b>	<b>'</b>	~	<b>/</b>	~
Favorable Attitudes Toward ASB		<b>/</b>	<b>/</b>	<b>✓</b>		<b>✓</b>		<b>'</b>	<b>✓</b>	<b>~</b>	<b>/</b>
Friends' ATOD Use		<b>✓</b>	<b>✓</b>	<b>✓</b>				<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
Interaction with Antisocial Peers		<b>✓</b>		<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>/</b>
Rewards for Antisocial Involvement		<b>/</b>	<b>/</b>	<b>✓</b>		<b>✓</b>		<b>'</b>	<b>✓</b>	<b>~</b>	<b>/</b>
Rebelliousness		<b>/</b>	<b>/</b>			<b>✓</b>	<b>✓</b>	<b>'</b>	<b>✓</b>	<b>~</b>	
Sensation Seeking		~	<b>✓</b>	~		<b>V</b>		<b>'</b>	~	<b>/</b>	<b>/</b>
Gang Involvement	<b>V</b>				<b>/</b>	<b>V</b>	<b>~</b>				
Depression	<b>V</b>			<b>'</b>	<b>V</b>		<b>V</b>				<b>/</b>
Peer-Individual Domain: Protective Factors											
Peer Disapproval of ATOD Use		~	~	<b>/</b>				<b>'</b>	<b>'</b>	<b>'</b>	<b>/</b>
Religiosity		<b>/</b>			<b>/</b>	<b>'</b>		<b>'</b>	<b>'</b>		
Belief in the Moral Order		~	~	~		<b>V</b>		<b>'</b>	<b>'</b>	<b>'</b>	~
Educational Aspirations		<b>/</b>	<b>✓</b>	<b>✓</b>	~	<b>'</b>	<b>/</b>	~	<b>'</b>	<b>'</b>	~

NOTES: Checks (🗸) indicate risk factors that are higher than or equal to statewide percentages, and protective factors that are lower than or equal to statewide percentages.

TABLE 16
Hawaii <u>Sex</u> and <u>Ethnic</u> Comparisons of Risk and Protective Factors:
Identification of Factors that Should be the Focus of Prevention Efforts, 2000

	S	bex					
Risk/Protective Factors	Males	Females	Chinese	Filipino	Japanese	Hawaiian	White
Community Domain: Risk Factors							
Low Neighborhood Attachment		~	<b>V</b>	<b>V</b>			<b>V</b>
Community Disorganization	<b>✓</b>			<b>V</b>		~	
Transition & Mobility		~				~	<b>V</b>
Exposure to Community ATOD Use		~				~	<b>V</b>
Laws and Norms Favorable to ATOD Use	<b>V</b>					~	<b>V</b>
Perceived Availability of Drugs and Handguns	<b>V</b>						<b>V</b>
Ability to Purchase Alcohol or Tobacco	<b>✓</b>					~	<b>V</b>
Community Domain: Protective Factors							
Community Opportunities for Positive Involvement	<b>V</b>		<b>V</b>	<b>V</b>			
Community Rewards for Positive Involvement			<b>&gt;</b>	<b>V</b>	<b>V</b>		
Family Domain: Risk Factors							
Poor Family Supervision	<b>V</b>		<b>V</b>	<b>V</b>			
Family Conflict		~				~	
Lack of Parental Sanctions for ATOD Use	<b>V</b>			<b>V</b>		~	<b>V</b>
Parental Attitudes Favorable Toward ATOD Use	<b>V</b>					~	<b>/</b>
Exposure to Family ATOD Use		~				~	<b>/</b>
Parental Attitudes Favorable Toward ASB	<b>V</b>					~	<b>/</b>
Family (Sibling) History of ASB		~				~	<b>V</b>
Family Domain: Protective Factors							
Family Attachment		<b>V</b>	<b>V</b>	<b>'</b>			
Family Opportunities for Prosocial Involvement	<b>✓</b>		<b>V</b>	<b>'</b>	<b>✓</b>		
Family Rewards for Prosocial Involvement	~		<b>V</b>	~	<b>V</b>		

## TABLE 16 (continued) Hawaii <u>Sex</u> and <u>Ethnic</u> Comparisons of Risk and Protective Factors: Identification of Factors that Should be the Focus of Prevention Efforts, 2000

	S	Sex	Ethnicity							
Risk/Protective Factors	Males	Females	Chinese	Filipino	Japanese	Hawaiian	White			
School Domain: Risk Factors										
Low School Commitment	~				~	~	<b>V</b>			
Poor Academic Performance	~			<b>V</b>		~				
<b>School Domain: Protective Factors</b>										
School Opportunities for Positive Involvement	~				~		<b>V</b>			
School Rewards for Positive Involvement	~				~		<b>V</b>			
Peer-Individual Domain: Risk Factors		_		_						
Early Initiation of Problem Behaviors	~					~	<b>V</b>			
Favorable Attitudes Toward ATOD Use	~					~	<b>V</b>			
Low Perceived Risk of ATOD Use	V					~	<b>V</b>			
Antisocial Behaviors (ASBs)	~					~	<b>V</b>			
Favorable Attitudes Toward ASB	~						<b>V</b>			
Friends' ATOD Use		~				~	<b>V</b>			
Interaction with Antisocial Peers	V					~	<b>V</b>			
Rewards for Antisocial Involvement	~					~	<b>V</b>			
Rebelliousness	~					~	<b>V</b>			
Sensation Seeking	~					~	<b>V</b>			
Gang Involvement	~			<b>/</b>		~				
Depression		~		<b>/</b>		~				
Peer-Individual Domain: Protective Factors							<u></u>			
Peer Disapproval of ATOD Use	<b>V</b>					~	<b>~</b>			
Religiosity	~		<b>V</b>		~	~	<b>V</b>			
Belief in the Moral Order	~					~	<b>V</b>			
Educational Aspirations	V			~		~				

NOTES: Checks ( $\checkmark$ ) indicate risk factors that are higher than or equal to statewide percentages, and protective factors that are lower than or equal to statewide percentages.

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